

**National Report
2020**

**Regulatory Office for Network Industries
(URSO)
Slovakia**

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Foreword

The Regulatory Office for Network Industries (hereinafter the "Office" or "URSO") has prepared a National Report for 2020 and submits it to the Agency of the European Union for the Cooperation of Energy Regulators (ACER) and the European Commission in accordance with its obligation under Article 59 (1) (i) of Directive (EU) 2019/944 on common rules for the internal market for electricity, Article 41 (1) (e) of Directive 2009/73 concerning common rules for the internal market in natural gas and in accordance with Section 10 (d) of Act no. 250/2012 Coll. on regulation in network industries.

The Office presents the report in a structure which includes the most important information required by the Council of European Energy Regulators (CEER), ACER and DG ENER, in order to provide the best possible overview and monitor market and competition levels for electricity and gas retail and wholesale markets.

The Office also paid increased attention to the area of consumer protection and rights, improvement of the business environment, ensuring adequate quality of supply and service provision, environmental objectives and the development of international cooperation.

The Office made efforts in fulfilling the main tasks arising from the application of respective EU regulations and directives while integrating in its activities the objectives of the Regulatory Policy of the fifth regulatory period 2017-2021.

In November 2020, Amendment no. 1 to the Regulatory Policy for the 2017 - 2021 regulatory period was adopted. The Amendment extended the current regulatory period by one year, i.e. until the end of 2022, and it also includes the needed adjustments to bridge this transitional period.

The Office is headed by the Chairman, supported by two Vice-Chairmen. The Regulatory Board is a body of the Office consisting of six members and is responsible for approving the Office's regulatory policy, regulation strategy and for decisions on appeals against first-instance decisions, except for decisions on imposing fines and decisions on disputes.

The report provides information developments in the internal energy market for 2020 divided into the individual sectors - electricity and gas.

As at 31 December 2020, the Office employed a total of 113 staff (excluding the Regulatory Board members).

Management



Andrej Juris
Chairman



Szabolcs Hodosy
Vice-Chairman



Martin Horváth
Vice-Chairman

Chairman's message

Upon my appointment as Chairman of the Office in July 2020, I announced three key priorities - fair prices, the protection of vulnerable consumers, and the development of innovation and competition in energy solutions. I am convinced that the common denominator for the systematic fulfilment of these objectives is effective and transparent communication with the public, as is the case with ACER, the European energy regulator, which adopts all major decisions in the form of public consultations. Therefore, I considered the maximum involvement of the public, especially the professional one, in the regulatory process during 2020 to be extremely important.

However, 2020 was primarily a year of pandemic for us. Many people in Slovakia experienced difficult economic times due to the coronavirus, and it was our duty as the national regulator to respond adequately, whether to households or businesses. That is why we initiated the creation of several working groups and expert advisory committees. This created space for representatives of industrial as well as vulnerable customers to participate in the discussion on the adjustment of the regulatory framework and the impact of regulated electricity, gas, heat or water prices on the industry and economy of the Slovak Republic, but especially on the households and people affected by energy poverty.

I would like to highlight a novelty in the transparency process of the Office, which resulted from the amendment to the Act no. 250/2012 Coll. on regulation in network industries, as amended. Since 1 September 2020, the Office began to publish on its website, in addition to price (tariff) decisions, all price (tariff) proposals together with the relevant documents submitted to the Office by regulated entities. This publication is one of the steps that has made the Office's activities more open to the public. The regulatory decisions taken in 2020 are therefore also the result of a relatively complex but all the more transparent process of close consultations, in which all parties have sufficient space to express their views, suggestions and comments.

When assessing 2020, one must not forget the process which was under public scrutiny, even the search for a solution to the difficult situation of producers of electricity from renewable sources and combined heat and power generation, who were in arrears of the payment of their obligations to the state and thus lost the entitlement to support. We did a systematic and thorough examination of the individual cases in order to identify the objective state of affairs and seek a fair solution. Thanks to the adoption of the relevant amendment to Act no. 309/2009 Coll. on RES and CHP promotion by the National Council (Parliament) of the Slovak Republic and intensive cooperation with the concerned institutions, we managed to set the parameters of the review of the whole process on a fair and non-discriminatory basis. Here I wish to recall that the Office, based on such practical experience, has the ambition to streamline the comprehensive digitization of the entire process of obtaining data from state institutions and regulated entities, which will of course require the necessary funds from the state budget.

An important event in 2020 was undoubtedly the November decision of the Regulatory Board to adopt the amendment to the regulatory policy, extending the current regulatory period until 2022 and resulting in the Office having adapted the preparation of the new regulatory policy accordingly. In this context, I would like to emphasize that my first year in the Office and my previous experience in the European energy sector confirm that a systematic and transparent

performance of regulation remains the right path and a fundamental approach for the Office to achieving fair prices and protecting vulnerable consumers, promoting competition in emerging energy markets, and the integration of innovative solutions into the system of regulation in network industries in the Slovak Republic.

In conclusion, I would like to express my appreciation for the work and involvement of the Office's staff, who, despite the difficulties caused by the pandemic, were able to ensure a smooth operation of regulatory processes and proceedings at the Office. I would also like to thank all the institutions, companies and partners with which we come into working contact in the performance of our regulatory activities.

[Overview of referred primary national legislation](#)

| | |
|--------------|---|
| Act 250/2012 | Act no. 250/2012 Coll. on regulation in network industries (Regulatory Act) as amended |
| Act 251/2012 | Act no. 251/2012 Coll. on the energy sector (Energy Act) as amended |
| Act 309/2009 | Act no. 309/2009 Coll. on the promotion of renewable energy sources and high-efficiency cogeneration (RES and CHP Promotion Act) as amended |
| Act 211/2000 | Act no. 211/2000 Coll. on free access to information (Freedom of Information Act) as amended |

[1. Electricity](#)

[Characteristics of the electricity market and its regulation](#)

The Office carries out tariff as well as technical (non-tariff) regulation in electricity in a relatively wide scope - in the entire chain from generation up to supply to the final consumer. Subject to tariff regulation is not only generation, transmission, distribution and supply of electricity and related services, but also, for example, the activities of the short-term electricity market operator, or the activities of the electricity purchaser. In the area of technical regulation, the Office approves grid codes, business terms and conditions or issues business licenses in the electricity sector. The electricity sector is clearly one of the most dynamic and at the same time most complex regulatory sectors in the field of energy regulation.

In terms of increasing transparency and open regulation in electricity, it should also be noted that since 1 September 2020 the Office has been publishing in addition to valid price (tariff)

decision also the regulated entities' price (tariff) proposals aiming to increase public confidence in the Office and access to essential information on which tariff regulation is based.

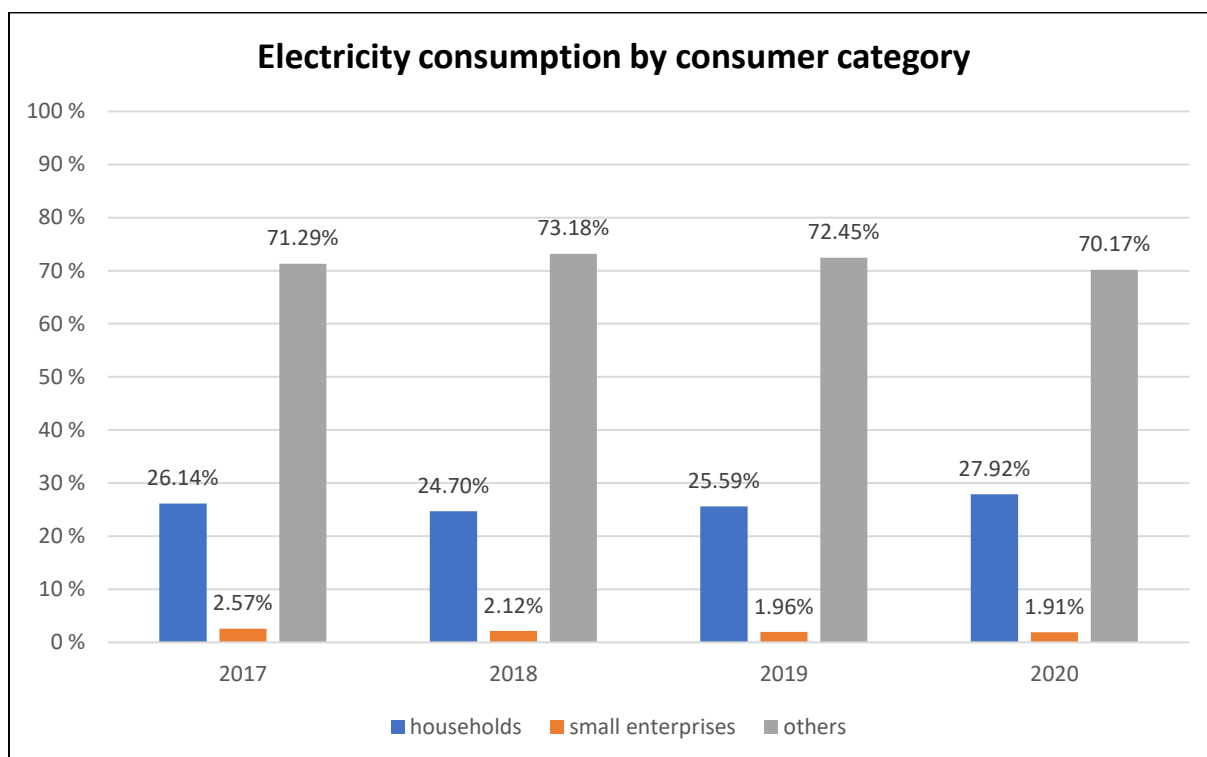
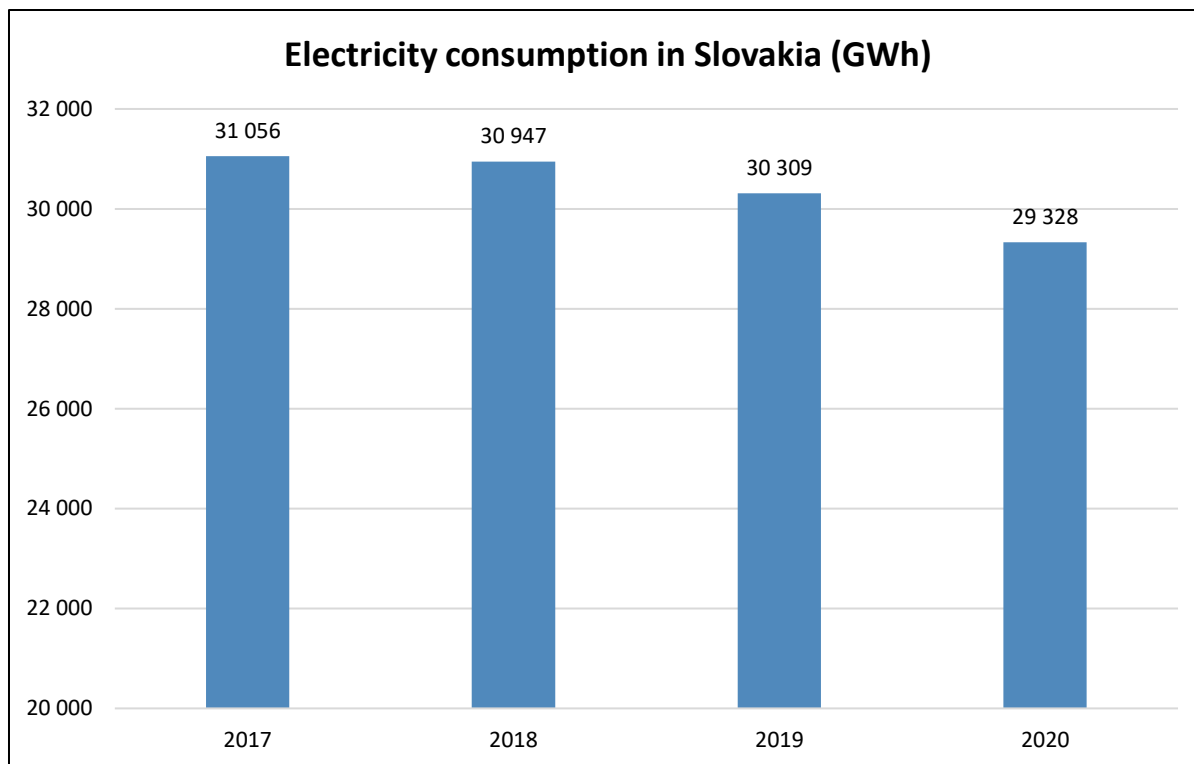
The unbundling of generation from network services (transmission and distribution) was completed on the basis of Directive 2009/72/EC transposition, by issuing a certification to the transmission system operator in 2014.

The year 2020 in electricity can be characterized as a year of decline. After years of rising commodity prices, world energy exchanges experienced significant falls, which were caused by lower electricity demand. However, the fall in electricity prices on the markets did not paradoxically mean reduction of all costs in the sector.

Low prices in the day-ahead markets during 2020 caused, inter alia, an increase in feed-in-tariff payments. This meant one of the Office's main tasks in electricity regulation in 2020 was to eliminate the negative effects of the pandemic on individual categories of electricity consumers. The Office's efforts that year were thus aimed to ensure balance and stability between the participants in the electricity market.

2020 was also the fourth year of the 2017-2022 regulatory period. A key subject in electricity was clearly the ongoing process of transposition of the EU legislation (Clean Energy Package) into national legislation. In this area, the Office worked closely with the Ministry of Economy of the Slovak Republic on the preparation of the implementation of EU regulations into national primary legislation.

Electricity consumption in Slovakia in 2020 reached 29 328 GWh, which is 3.24% less than in 2019.



SEPS – the electricity TSO

The Office is the responsible authority approving the TSO's grid code by which capacity allocation procedures and congestion management on cross-border profiles are governed. In 2020 cross-border interconnectors' capacities of Slovakia's transmission system provided for the necessary stability and security of the grid not only in the country, but also in the context of the EU.

Available resources and investments of SEPS

| Years | 2017 | 2018 | 2019 | 2020 |
|-------------------------|-------------|-------------|-------------|-------------|
| Available resources (€) | 125 073 880 | 109 906 527 | 115 430 154 | 109 758 009 |
| Investments (€) | 50 456 121 | 51 355 867 | 54 367 053 | 75 509 721 |
| Investments share (%) | 40.34% | 46.73% | 47.10% | 68.80% |

Decisions adopted by the Office under non-tariff regulation in electricity

| | No. of decisions adopted | | | |
|--------------------------------|--------------------------|------|------|------|
| | 2017 | 2018 | 2019 | 2020 |
| Operational codes | 16 | 21 | 15 | 15 |
| Business terms and conditions | 19 | 26 | 10 | 10 |
| EU legislation-based decisions | 7 | 20 | 27 | 5 |
| Transit flow conditions | 3 | 2 | 4 | 2 |

Decisions adopted by the Office under tariff regulation in electricity (excl. RES and CHP) on:

| | 2017 | 2018 | 2019 | 2020 | |
|------------------------|------|------|------|------------------|------------------|
| | | | | adopted for 2020 | adopted for 2021 |
| Tariff decisions | 487 | 331 | 301 | 49 | 112 |
| Proceedings suspended | 15 | 20 | 20 | 20 | - |
| Proceedings terminated | 4 | 5 | 7 | 2 | - |

Network tariffs

In 2020 price cap method was applied in the electricity sector in line with the approved regulatory policy for 2017-2022. This tariff regulation method gave system operators, provided they behave efficiently and optimize their costs, an opportunity to retain reasonable profits.

Transmission grid

The Office fixed the following network tariffs for the TSO, which could be applied towards customers directly connected to the transmission system in 2020:

- tariff for reserved capacity (€/MW/year),
- tariff for transmitted power (€/MWh),
- tariff for transmission losses (€/MWh),
- tariff for system services (€/MWh).

Distribution networks

In electricity distribution, for customers connected directly to the distribution system at high and extra high voltage levels, the following network tariffs were applied:

- tariff for electricity distribution without losses, including transmission - reserved capacity component (€/MW/month),
- tariff for electricity distribution without losses, including transmission - distributed power component (€/MWh),
- tariff for distribution losses (€/MWh),
- tariff for system services (€/MWh).

For customers or electricity producers connected directly to the distribution system at low voltage levels, the following network tariffs set by the Office were applied:

- tariff for electricity distribution without losses, including transmission - reserved capacity component (€/A/month),
- tariff for electricity distribution without losses, including transmission - distributed power component (€/MWh),
- tariff for distribution losses (€/MWh),
- tariff for system services (€/MWh).

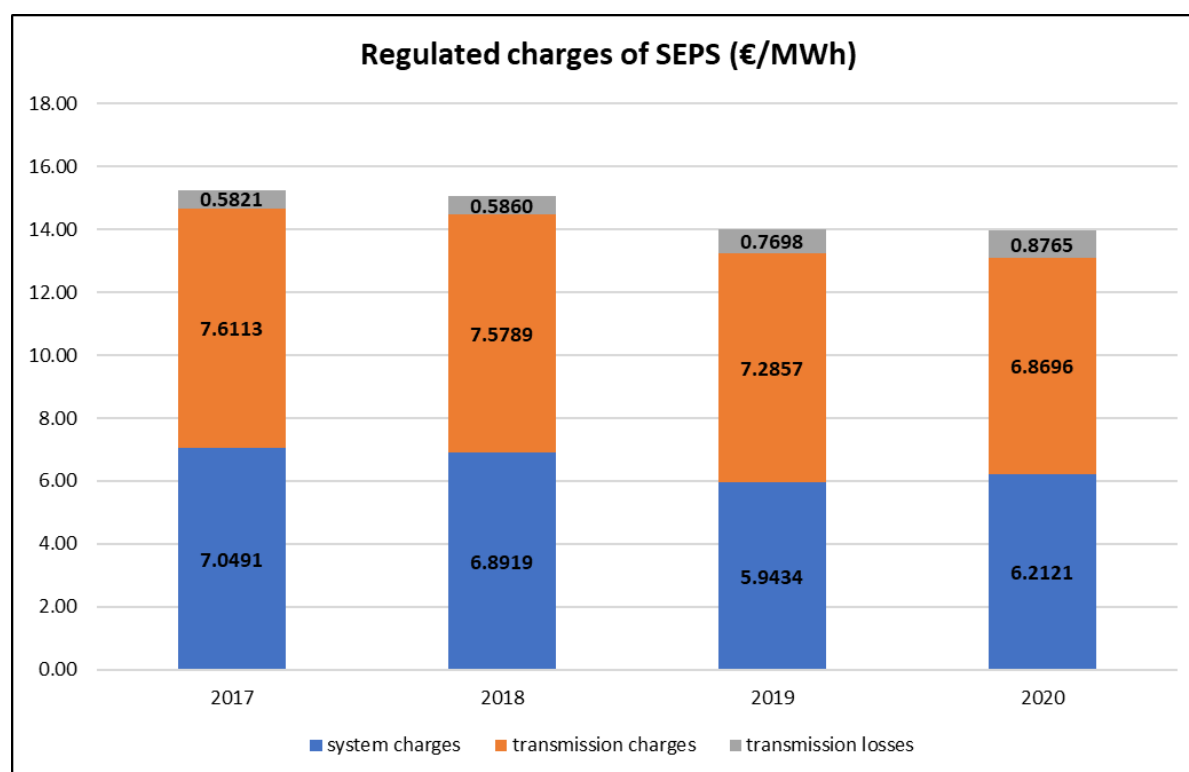
Tariff regulation was also applied for the local distribution system operators, namely by determining the method of calculating the maximum electricity supply tariff and tariff for access to the local distribution system and electricity distribution.

Transmitted electricity (GWh)

| Year | 2017 | 2018 | 2019 | 2020 |
|--------------------------------|--------|--------|--------|--------|
| Transmitted electricity volume | 31 975 | 28 619 | 31 395 | 31 524 |

Distributed electricity (GWh)

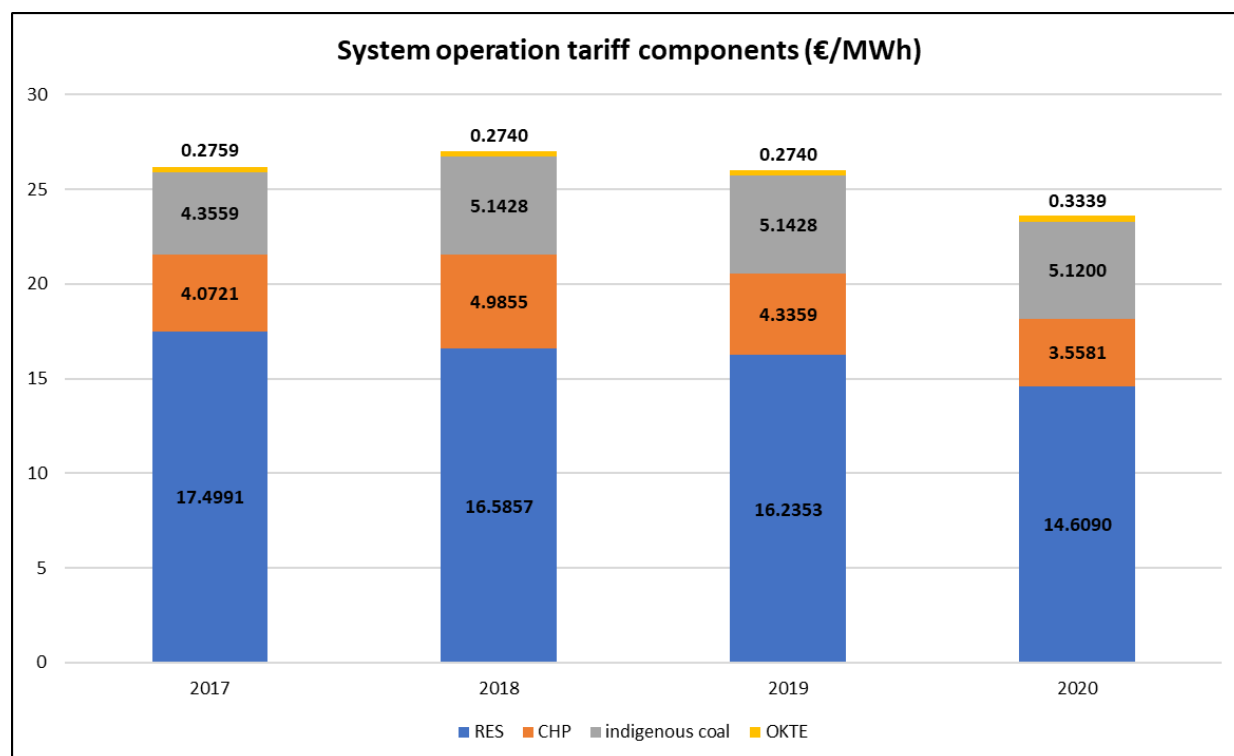
| Year | 2017 | 2018 | 2019 | 2020 |
|--------------------------------|--------|--------|--------|--------|
| Distributed electricity volume | 19 755 | 19 973 | 19 783 | 19 060 |



System operation tariff

The system operation tariff is a fixed price for electricity volume which includes aliquot parts of costs of electricity generation from indigenous coal, renewable energy sources (RES), high-efficiency co-generation (CHP) and activities of the short-term market operator (OKTE). The tariff was applied for end consumption.

The Office set fixed prices for electricity produced from RES and CHP depending on the electricity generation's technological process, date of commissioning, installed capacity and the method of financing.



Ancillary and system services

Ancillary services are services the TSO procures in the open market and, with their assistance, provides network users with system services necessary to maintain the quality of power supply and secure operational reliability of Slovakia's power grid. Following their activation balancing energy can be supplied.

Upon TSO's request for the volumes of specific ancillary services types, total planned procurement costs for all types of ancillary services from certified ancillary service providers were fixed by the Office for the TSO.

The Office also set maximum tariffs for providing primary and secondary active power control and tertiary active power controls, and maximum annual costs of providing remote voltage control, reactive power and black start. Maximum tariff of offered positive balancing energy and minimum tariff of offered negative balancing energy at the activation of the respective ancillary service type were also fixed by the Office.

The tariffs of balancing energy were set in a transparent manner on the basis of bid prices of used ancillary service providers installations as:

- the highest price of the generation source providing balancing energy on a quarter-hourly basis, if the balancing energy is positive, but not more than the maximum tariff set in URSO tariff decision,
- the lowest price of the generation source providing balancing electricity on a quarter-hourly basis, if the balancing electricity is negative, but not less than the minimum price set in URSO tariff decision.

The TSO purchased various types of ancillary services required to secure system services from ancillary services providers. The goal was to achieve minimum costs of ancillary services while organising the procurement in an open, transparent and non-discriminatory manner towards all providers.

The TSO made preferable use of bids from installations within the defined territory while respecting the principle of procurement cost minimization. Technical qualifications of ancillary service providers were demonstrated by certified measurements as specified in the technical requirements.

Ancillary services indicators

| <i>Indicator/year</i> | <i>2017</i> | <i>2018</i> | <i>2019</i> | <i>2020</i> |
|------------------------------------|--------------------|--------------------|--------------------|--------------------|
| No. of providers | 25 | 25 | 24 | 24 |
| No. of bids submitted by providers | 3637 | 2809 | 2429 | 2673 |
| No. of concluded contracts | 32 | 29 | 52 | 30 |

Balancing energy supply (MWh)

| <i>Type of balancing energy/year</i> | <i>2017</i> | <i>2018</i> | <i>2019</i> | <i>2020</i> |
|---|--------------------|--------------------|--------------------|--------------------|
| Primary power control + | 6 680 | 6 553 | 6 284 | 6 298 |
| Primary power control - | -6 679 | -6 567 | -6 245 | -6 325 |
| Secondary power control + | 121 264 | 112 853 | 67 522 | 30 994 |
| Secondary power control - | -105 927 | -95 954 | -133 695 | -98 576 |
| Tertiary power control 3 min. + | 5 887 | 2 097 | 1 552 | 404 |

| | | | | |
|---|------------|------------|----------|----------|
| Tertiary power control 3 min. - | -1 072 | -745 | -1 074 | -1 086 |
| Tertiary power control 10 min. + | 2 574 | 334 | 539 | 52 |
| Tertiary power control 10 min. - | -168 | -120 | -265 | 0 |
| Tertiary power control 15 min. + | 2 178 | 702 | 543 | 98 |
| Tertiary power control 15 min. - | -1 335 | -699 | -875 | -298 |
| Tertiary power control 30 min. + | not in use | not in use | 511 | 0 |
| Tertiary power control 30 min. - | not in use | not in use | 0 | 0 |
| Demand reduction | 4 459 | 285 | 511 | 0 |
| Demand increase | 0 | -6.795 | 0 | 0 |
| Import of emergency electricity | 3 300 | 0 | 0 | 0 |
| Secondary voltage control via reactive power compensation | 0 | 0 | 0 | -658 |
| Non-guaranteed balancing energy+ | 50 | 0 | 0 | 0 |
| Non-guaranteed balancing energy - | 0 | 0 | 0 | 0 |
| e-GCC+ | 54 425 | 40 209 | 31 170 | 51 410 |
| e-GCC- | -36 430 | -38 969 | -59 383 | -92 933 |
| IGCC+ | 0 | 0 | 0 | 0 |
| IGCC- | 0 | 0 | 0 | 0 |
| Positive balancing energy | 200 816 | 163 032 | 108 121 | 89 256 |
| Negative balancing energy | -151 611 | -143 060 | -201 537 | -199 875 |

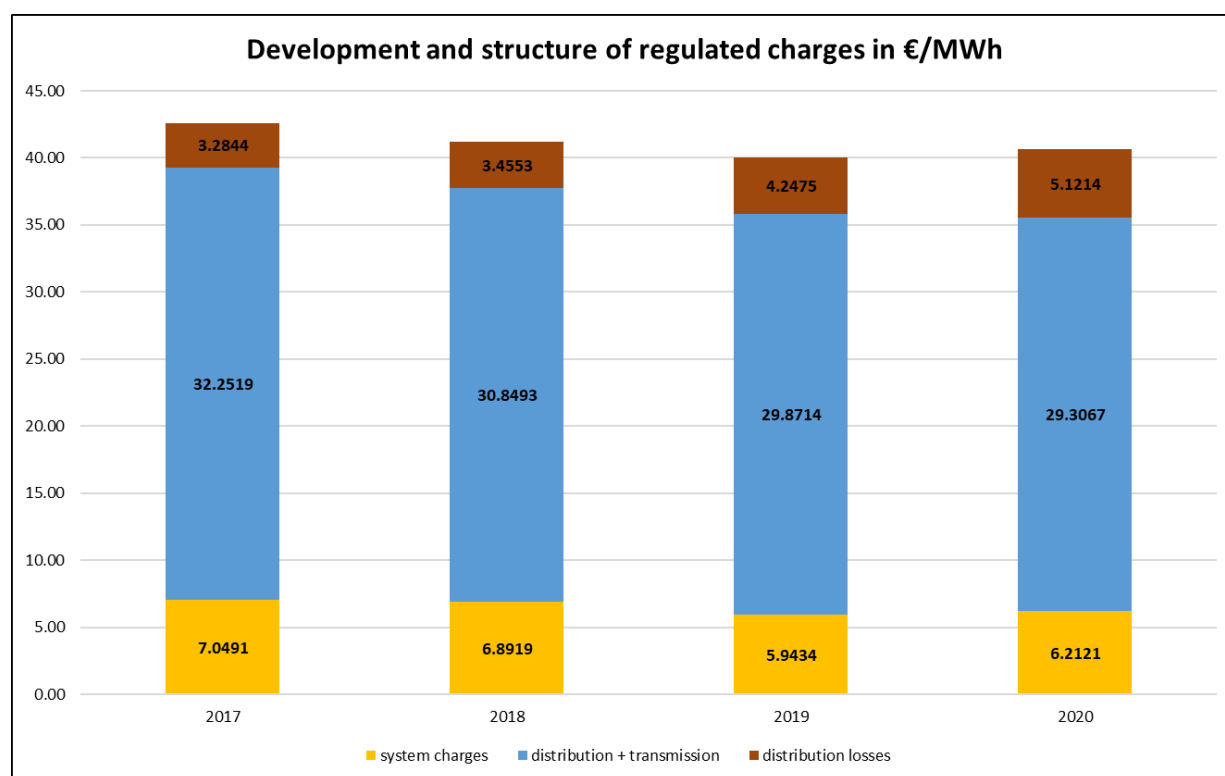
Market coupling

The market coupling (4M MC) project (coupling of Czech, Slovak, Hungarian and Romanian day-ahead markets) is one of the ways contributing to the creation of the single pan European electricity market. In the 4M MC, systems are already in place which were designed for the target model of the single day-ahead electricity market. This model of European price coupling simultaneously determines volumes and prices in each bidding zone based on the marginal pricing principle pursuant to the Commission regulation on capacity allocation and congestion management (CACM).

In 2020, operation, evaluation, clearing and settlement was performed in the short-term market on a daily basis including final monthly settlements. OKTE reported an increase in the volume of electricity traded in the 4M MC day-ahead market in 2020 as compared to the previous year – total volume reached 13.27 TWh, up by 2.19 TWh against 2019.

GCC

Balancing energy procured by the TSO under contracts concluded with ancillary service providers or balancing energy suppliers in the GCC system was, in the framework of imbalance evaluation, clearing and settlement, billed as secondary control balancing energy at a specific tariff set by the Office. The allocation of revenue from the implementation of GCC was fixed by the Office in a tariff proceeding. Part of the revenue was left to SEPS and another part was used to reduce the system services tariff. The actual result of balancing energy purchases in the GCC system in 2020 became a revenue of the TSO in the amount of 8 711 574.37 EUR.



Competition

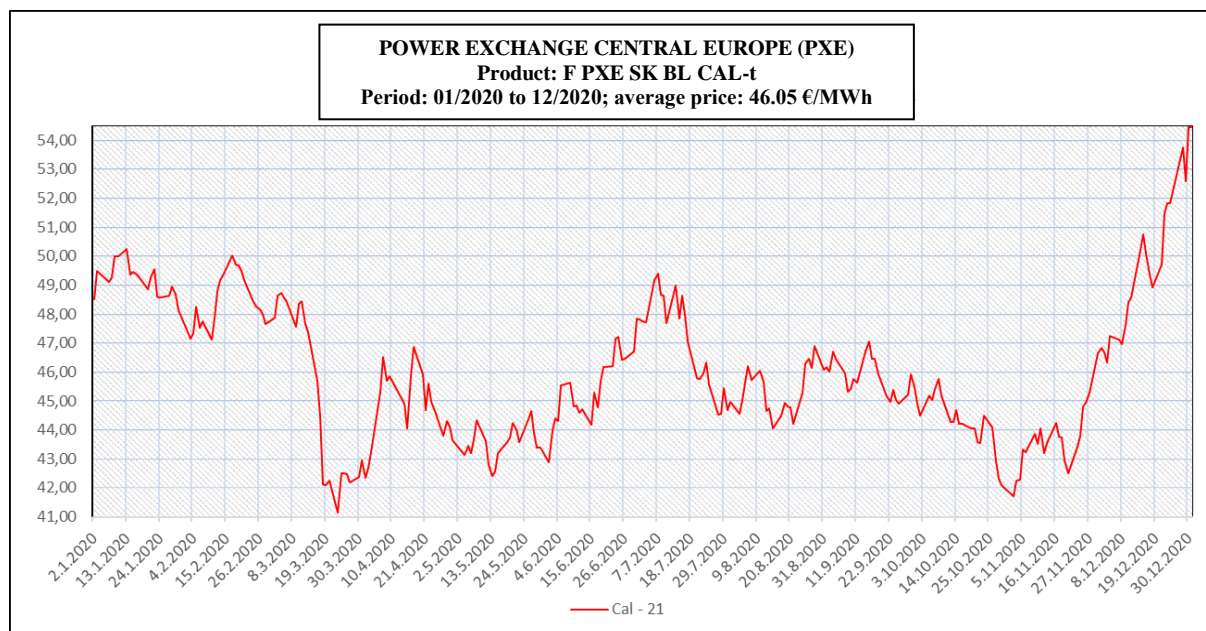
Wholesale market

In the wholesale electricity market, the Office's powers lay only in the creation of the legislative framework and monitoring compliance.

Electricity market participants

- electricity producers (Slovenské elektrárne, a.s. – dominant producer, 64.71% market share),
- short-term market operator (OKTE),
- Slovakia's power transmission system operator (SEPS),
- three regional distribution system operators (ZSD, SSD, VSD),
- local distribution system operators,
- electricity suppliers,
- electricity consumers,
- the electricity purchaser.

Evolution of the commodity price



Retail market

Act 250/2012 introduced tariff regulation of electricity supply to vulnerable customers comprising households and small enterprises.

Tariff regulation was applied to:

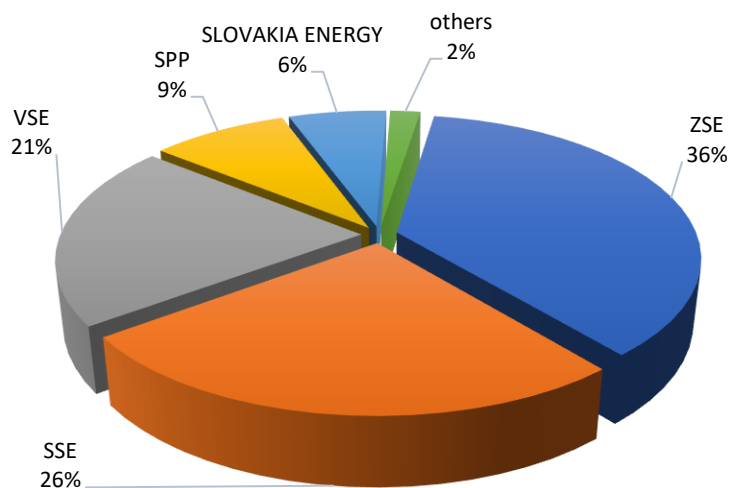
- supply to households,
- supply to small enterprises,
- the last resort supplier regime.

Electricity supply to households

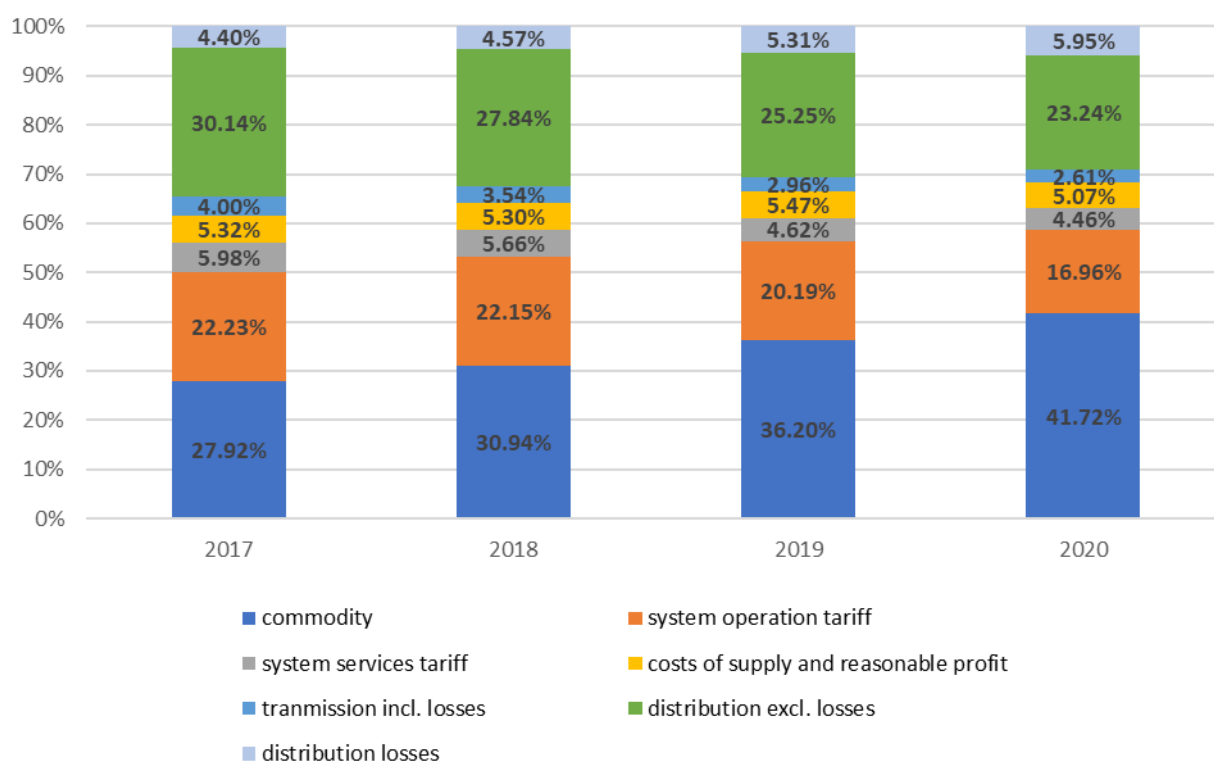
The default parameters for setting the maximum tariff of electricity supply to households for 2020 were: arithmetic average of day-ahead prices published in the official price list of PXE (Power Exchange Central Europe) on its website, of the F PXE SK BL Cal-t product for the period between 1 January and 30 June 2019; the percentage coefficient of up to 10% to cover the forecasted profile of electricity supply to households; and costs of imbalance related to electricity supply to households.

On top of the supply tariff, electricity suppliers charged the tariff for electricity distribution including transmission and transmission losses, distribution losses, system services tariff and system operation tariff pursuant to URSO tariff decision. By this decision tariffs were approved or fixed for access to the distribution system and electricity distribution for the DSO to whose network the household consumer was connected.

MARKET SHARES OF ELECTRICITY SUPPLIERS TO HOUSEHOLDS IN 2020



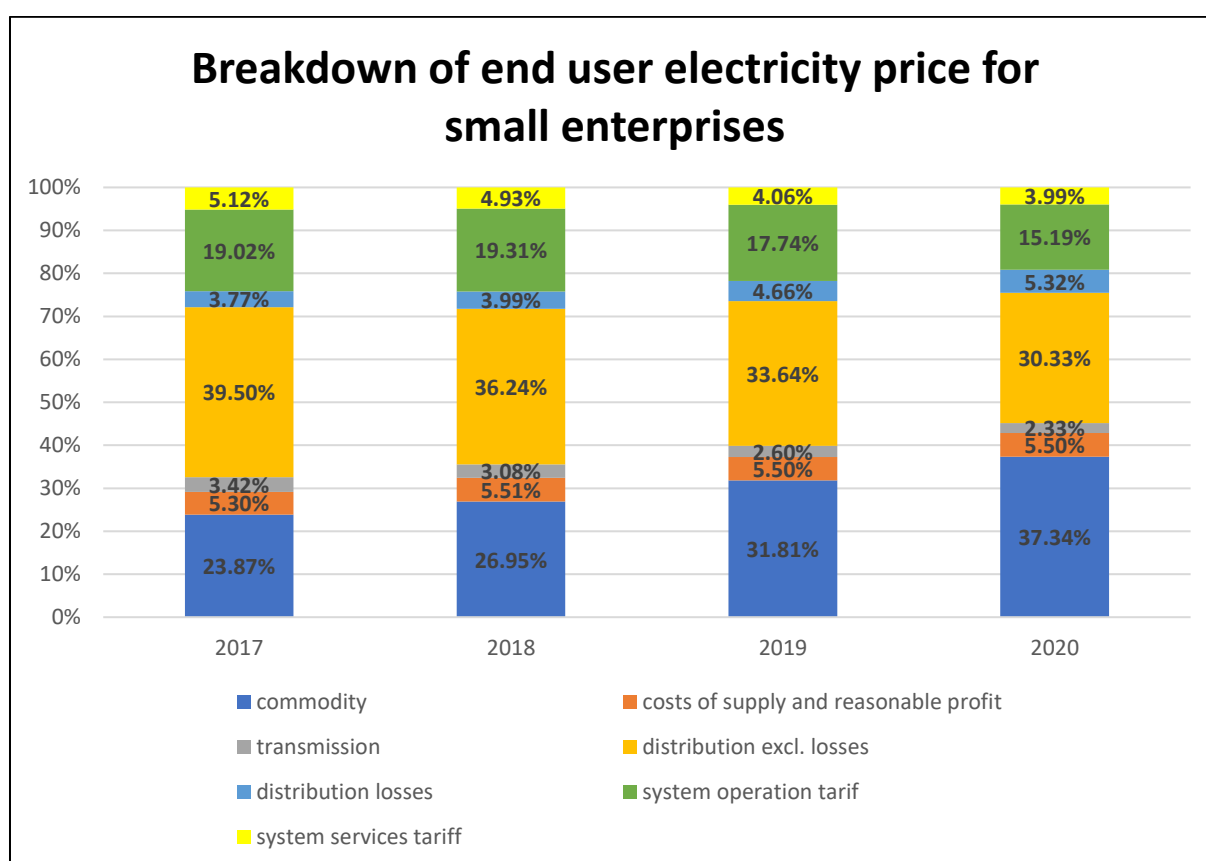
Breakdown of end user electricity price for households



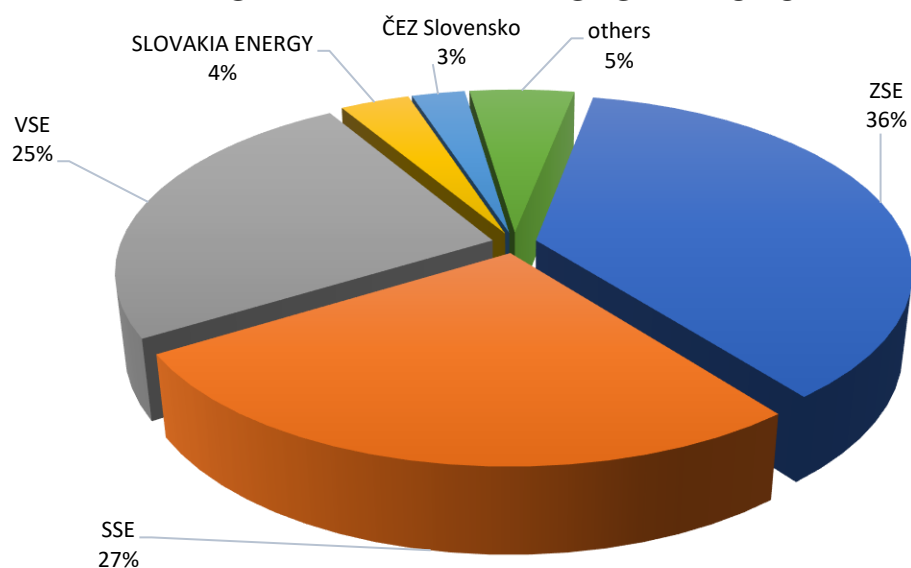
Electricity supply to small enterprises

A small enterprise is defined as an end consumer with total annual consumption in all of their meter points of up to 30 000 kWh for the year preceding the year for which the respective tariff proposal is submitted. Electricity supply to small enterprises was divided into eleven tariffs. In 2020, the Office issued 105 tariff decisions on electricity supply to vulnerable consumers (households and small enterprises), up by ten compared to 2019.

The default parameters for setting the maximum tariff for electricity supplied to small enterprises for 2020 were: arithmetic average of day-ahead prices published in the official price list of PXE on its website, of the F PXE SK BL Cal-t product for the period between 1 January and 30 June 2019; percentage coefficient of up to 10% to cover the forecasted profile of electricity supply to small enterprises; and costs of imbalance related to electricity supply to small enterprises.



MARKET SHARES OF ELECTRICITY SUPPLIERS TO SMALL ENTERPRISES IN 2020

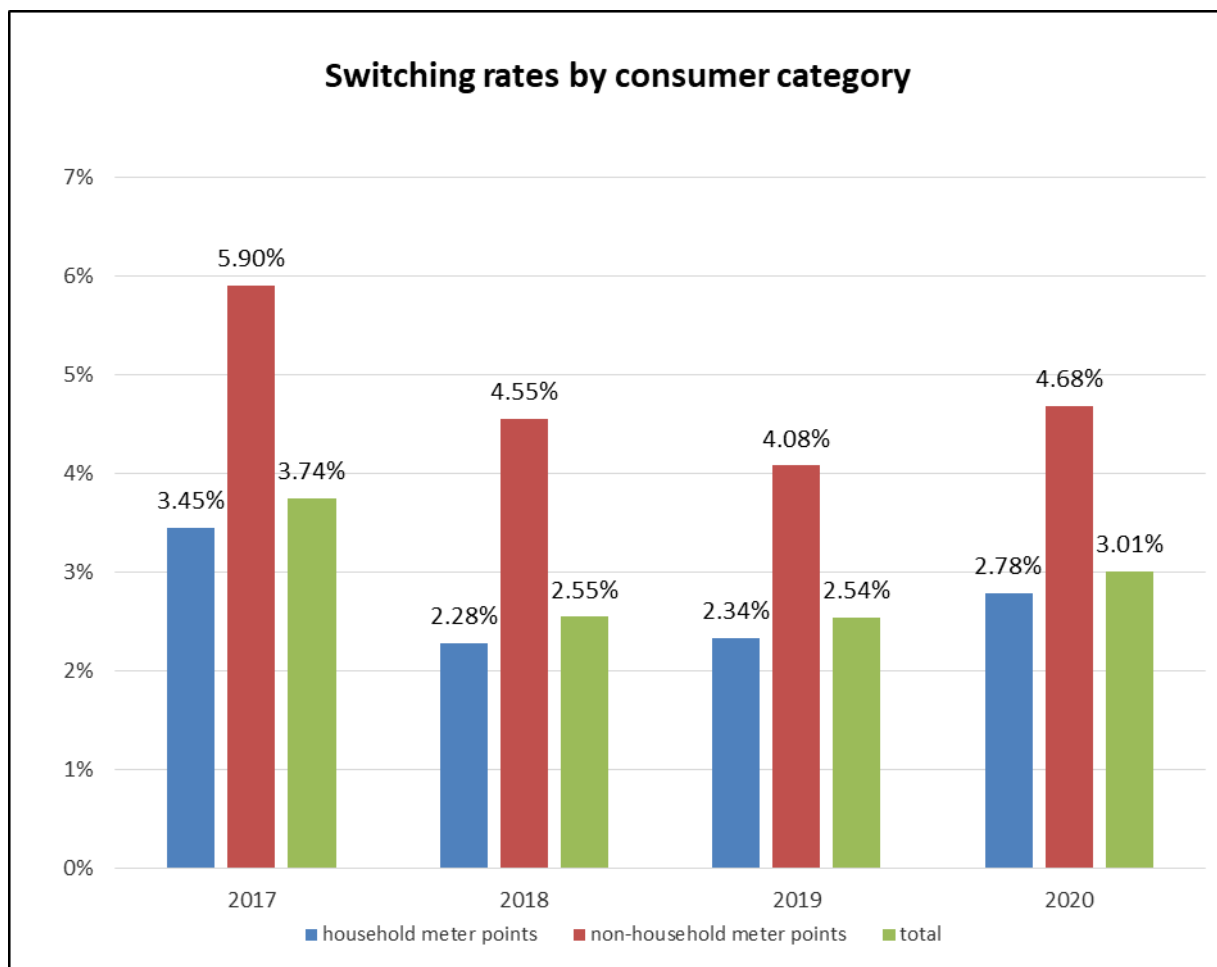


Last resort supply

In 2020, no notification of the application of the last resort supplier regime was reported to the Office. The last resort suppliers were ZSE Energia, Východoslovenská energetika and Stredoslovenská energetika.

Switching

In order to assess the level of electricity market liberalization, a per cent indicator (“switching”) is used, which is the share of the number of meter points with a change of electricity supplier, to the total number of meter points in a given year.



Impact of the corona crisis

In connection with the spread of COVID-19 and the emergency measures taken in response to it, the Office called as early as March 2020 on regulated entities and all participants in the regulated commodities market asking them to offer flexible and responsive solutions to potential problems arising in business and consumer relations and consider the restrictions resulting from measures announced by Slovakia's government and relevant public authorities.

In 2020, due to the pandemic, the price of the commodity on the PXE exchange fell, which had a positive effect on the price of electricity supply. Due to the decrease in the commodity price, which is included in the calculation of the tariff for electricity supply (-11.08%), the Office initiated proceedings to amend tariff decisions for electricity suppliers, which has a positive impact on the end electricity price for vulnerable customers in 2021.

Measures taken by the Government, especially during the first half of 2020, when also some major industrial enterprises had to be closed, inevitably led to a cut in final electricity consumption, resulting in decreased revenues from the system operation tariff.

Apart from the fall of final electricity consumption, reduced electricity prices on the day-ahead market in 2020 led to increased expenditures on RES and CHP promotion, which negatively affected the financial stability of OKTE, the party responsible for the RES/CHP support settlement.

Electricity generation from RES and CHP

In order to reduce the volume of support paid through the feed-in-tariff scheme and entering the system operation tariff, the Office announced at the end of 2020 a pilot regime of so called repowering. Its aim is to extend the period of support beyond 15 years, which will create space for reducing the system operation tariff in electricity prices for consumers and at the same time promote the decarbonisation goals of the Slovak Republic. The Office's intention was to involve as many electricity producers as possible from solar energy, biogas, hydropower, biomass, landfill gas and gas from wastewater treatment plants.

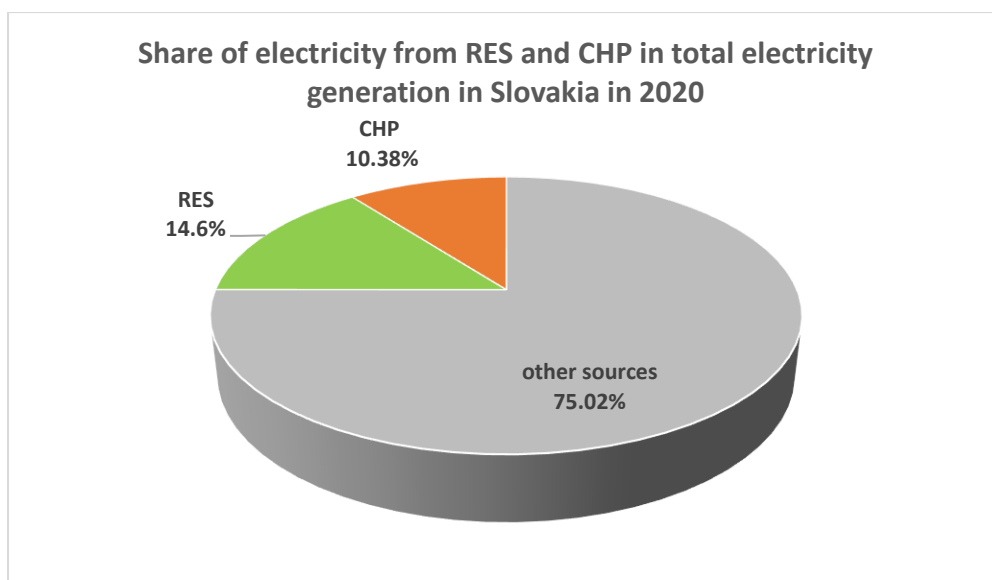
Key objectives and priorities for the energy sector until 2035, with a view to 2050, were set and approved as part of the Energy Policy of the Slovak Republic by the Government back in November 2014. The strategic goal is to achieve a competitive, low-carbon energy sector providing for a secure, reliable and efficient supply of all forms of energy at affordable prices while taking into account consumer protection and sustainable development.

The development of Slovakia's energy sector is focused on energy mix optimisation in order to reduce as much as possible the greenhouse gas emissions and pollutants while maintaining, or increasing the country's energy security and affordability of individual types of energy. The main energy and climate targets for 2030 are to achieve in the EU a reduction in greenhouse gas emissions of at least 40% compared to 1990 and a share of energy from RES in gross final energy consumption of at least 32%.

Support scheme

The gradual deployment of low-carbon technologies for electricity generation has led to a reduction of fossil fuel consumption and therefore also of greenhouse gas emissions. The current support scheme enables achievement of the set goals in a cost-effective way. With the construction of electricity generation sources with a relatively small installed capacity, the necessary increase of installed capacity leading to an increased share of RES can be expected in the coming years. Due to its proximity to the customer, such electricity generation does not place increased demands on transmission capacities.

The total number of electricity generation sources from RES and CHP supported under the feed-in-tariff scheme in 2020 stood at the same level as in 2019, i.e. a total of 2 553 sources. Based on data submitted to the Office by SEPS, the total electricity generation in the Slovak Republic reached 29 010 GWh.



By the amended Act 309/2009 (on the promotion of RES and CHP), with effect from 1 January 2019, the support scheme for electricity generation from RES and CHP was changed to a more market-based type in keeping with the best practices and EU legislation requirements. The new forms included, in particular, support for RES with a total installed capacity of over 500 kW by the so-called feed-in-premium, as well as the definition of the term local source.

Currently supported RES technologies

- hydropower with installed capacity of up to 500 kW,
- geothermal energy,
- combustion of landfill gas or gas from waste water treatment plants with installed capacity of up to 500 kW,
- combustion of biogas produced by anaerobic fermentation with total capacity of up to 500 kW,
- combustion of high-efficiency cogeneration of biogas produced by anaerobic fermentation with total capacity above 250 kW and up to 500 kW.

Currently supported CHP technologies

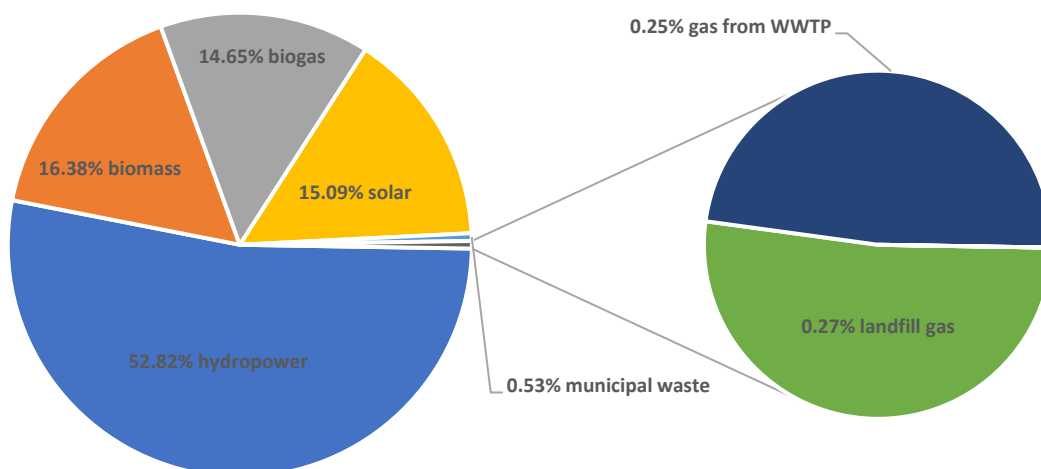
- combined cycle combustion turbine,
- combustion turbine with heat recovery,
- internal combustion engine fuelled with natural gas, heating oil, air/methane mixture, from catalytically treated waste, from thermal cracking of waste and its products,
- back-pressure steam turbine or condensing steam turbine with heat extraction fuelled with natural gas, heating oil, brown coal, hard coal with the electricity producer's total installation's capacity above 50 MW, municipal waste, gas produced by thermochemical gasification of waste in a gasifier or thermal cracking of waste,
- combustion of usable gases from metallurgical steel production,
- organic Rankine cycle,
- incineration or co-incineration of purposefully grown biomass excluding cereal straw, other waste biomass excluding cereal straw, bioliquid,
- combustion of biomethane obtained from biogas produced by anaerobic fermentation.

Tariff decisions

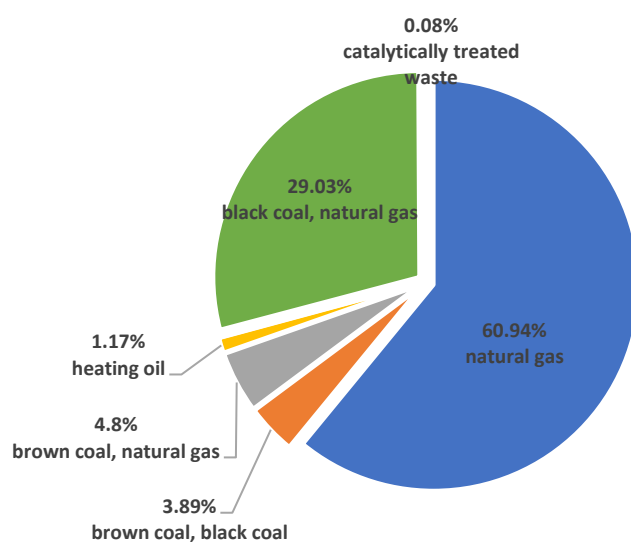
In 2020, the Office adopted a total of 114 tariff decisions in RES and CHP. 70 tariff decisions concerned a change in the fixed electricity price for setting the feed-in-tariff for 2021 due to a parameter change in natural gas as a fuel or due to a reconstruction of a CHP installation. The remaining 44 tariff decisions were adopted by the Office due to a change in the operator of an electricity generation installation, or a change in the fixed electricity price for setting the RES feed-in-premium.

The Office also issued, pursuant to Section 4b par. 7, 8 and 9 of Act 309/2009, 45 certificates of electricity generation in a local source for PV plants with total installed capacity of 2.94 MW.

Share of individual RES technologies in total RES generation in 2020



Share of individual CHP technologies in total CHP generation in 2020



The RES and CHP support scheme and requirements are laid down primarily in Act 309/2009. Following the requirements of EU legislation, since 2019, the support scheme has been revised for all new producers of electricity from RES and CHP, with an emphasis on environmental protection, especially in the expedience and more energy-efficient use of input raw materials. It includes, in particular, a requirement of the support of electricity produced by highly efficient cogeneration, as well as a requirement for at least 50% utilisation of heat produced in RES

installations. Details of electricity generation from RES and CHP are subsequently regulated by URSO Decree no. 18/2017 establishing tariff regulation in electricity and certain requirements for the performance of regulated activities in electricity, as well as URSO Decree no. 490/2009 laying down the details on the promotion of renewable energy sources, high-efficiency cogeneration and biomethane.

Until 31 December 2019, the entity responsible for the settlement of RES and CHP support was the respective regional DSO covering the defined territory in which the electricity generation installation with the entitlement to support was located.

OKTE became the single body responsible for RES and CHP support pursuant to Section 5b par. 10 of Act 309/2009, with effect from 1 January 2020. This was mainly due to the need of centralization of system and data management and support administration of RES and CHP support.

The actual electricity volumes produced by RES and CHP installations with the entitlement to support for the period 2012-2019 are the framework for the calculation of reference values of CAPEX for the acquisition of a new comparable technological part of the electricity producer's installation. These are published annually on the Office's website.

Parameters entering into the calculation of CAPEX reference values are obtained by the Office mainly from annual reporting of individual electricity producers and from the CAPEX and OPEX data of electricity producers from RES and CHP for 2018 and 2019. The computation of respective parameters entering into the calculation of the CAPEX reference values is based on the processing of output data from more than 2 400 electricity producers from RES and CHP. Overview of CAPEX reference prices for the acquisition of a comparable technological part of the electricity producer's installation valid for the period from 1 July 2020 to 30 June 2021 is divided into RES and CHP categories and listed in the following tables:

| Installations | | Reference price in €/MW |
|--|--------------------------|------------------------------------|
| RES | | |
| a) hydropower with total installed capacity | | |
| 1. | up to 100 kW | 3 097 386 |
| 2. | over 100 kW up to 200 kW | 2 476 000 |
| 3. | over 200 kW up to 500 kW | 2 049 147 |

| | | |
|----------------------|---|--------------------------------|
| b) | geothermal energy | 5 208 000 |
| c) | combustion of | |
| 1. | landfill gas or gas from waste water treatment plants with total capacity of up to 500 kW | 1 743 281 |
| 2. | biogas produced by anaerobic fermentation with total capacity of up to 500 kW | 4 536 350 |
| d) | combustion of high-efficiency cogeneration of biogas produced by anaerobic fermentation with total capacity over 250 kW and up to 500 kW | 3 934 169 |
| Installations | | Reference price in €/MW |
| CHP | | |
| a) | combined cycle combustion turbine | 632 163 |
| b) | combustion turbine with heat recovery | 643 359 |
| c) | internal combustion engine fuelled with | |
| 1. | natural gas | 455 351 |
| 2. | heating oil | 390 488 |
| 3. | air/methane mixture | 438 258 |
| 4. | from catalytically treated waste | 698 036 |
| 5. | from thermal cracking of waste and its products | 1 572 464 |
| d) | back-pressure steam turbine or condensing steam turbine with heat extraction fuelled with | |
| 1. | natural gas | 776 655 |
| 2. | heating oil | 775 116 |
| 3. | brown coal | 775 739 |
| 4. | black coal with total capacity of up to 50 MW | 793 200 |
| 5. | black coal with total capacity over 50 MW | 967 453 |
| 6. | municipal waste | 959 938 |
| 7. | gas produced by thermochemical gasification of waste in a gasifier or thermal cracking of waste | 1 207 609 |
| e) | combustion of usable gases from metallurgical steel production | 715 039 |
| f) | organic Rankine cycle | 954 338 |
| g) | incineration or co-incineration of | |
| 1. | purposefully grown biomass excluding cereal straw | 3 597 333 |
| 2. | other waste biomass excluding cereal straw | 3 440 000 |
| 3. | bioliquid | 2 196 071 |
| h) | combustion of biomethane obtained from biogas produced by anaerobic fermentation | 3 484 452 |

Cessation of entitlement to support

A significant event for the Office in 2020 was also the resolution of the issue regarding electricity producers, who were in arrears in their payment to the state during the receipt of support and for this reason permanently lost the entitlement to support through the feed-in-tariff based on Act no. 309/2009 Coll. In spring of 2020, the Office began to verify and identify electricity installations, for which the entitlement to support under Section 3 (1) c) or e) of Act 309/2009 had ceased as a result of a legal fact pursuant to Section 3b (5) of Act 309/2009 Coll. as amended, with effect until 31 October 2020. Subsequently, from autumn 2020, after Act 309/2009 was amended, the Office has been identifying the specific period of the arrears, during which the electricity producer with an entitlement to support cannot claim it for an installation pursuant to Section 3 (1) c) or e) of Act 309/2009.

On the basis of information available from the competent institutions concerning tax arrears, arrears in health insurance, social insurance and retirement pension scheme payments in the extent specified in the transitional provision of Section 18k (1) of Act 309/2009 in the wording effective from 1 November 2020, the Office identified 26 producers who permanently lost the entitlement to support via feed-in-tariff in connection with the legal fact pursuant to Section 3b (5) of Act 309/2009 in the wording effective until 31 October 2020. These producers remained in arrears in their payment to state authorities even after the adoption of the aforementioned softer version of the Act on the Support of RES and CHP and the amnesty does not apply to them.

Impact of the corona crisis

The impact of the COVID-19 pandemic in 2020 was only negligible in terms of the volumes of electricity produced from RES and CHP. However, the outbreak of the pandemic and the measures taken in response to it across the world caused a sharp fall in the price of the commodity on the Prague Power Exchange (PXE), but also a significant drop in the price of electricity on the spot (day-ahead) market. These factors resulted in a decrease in revenues from the system operation tariff and thus in a significant increase in the costs of OKTE as the support settlement body who pays out support collected from the system operation tariff (of which the feed-in-tariff scheme is a part) for electricity produced from RES and CHP.

Implementation of EU legislation

According to Act 250/2012 Office's powers include, inter alia, also the adoption of generally binding legislation, which takes the form of decrees. Based on the empowering provisions, the Office prepared, submitted to the legislative procedure and subsequently adopted Decree 181/2020, amending Decree 24/2013 establishing the rules for the functioning of the internal electricity market and the rules for the functioning of the internal gas market, as amended (with effect from 1 September 2020).

During the year, the Office actively participated in discussions on the transposition of directives and implementation of regulations resulting from the Clean Energy Package into Slovakia's legislation, in particular:

- Regulation (EU) 2019/941 on risk preparedness in the electricity sector
- Regulation (EU) 2019/942 establishing a European Union Agency for the Cooperation of Energy Regulators,
- Regulation (EU) 2019/943 on the internal market for electricity,
- Directive (EU) 2019/944 on common rules for the internal market for electricity

This legislative process representing a reform of the electricity market and partly of the gas market within Slovakia as well as the EU, was not completed in 2020 and will continue in 2021.

2. Gas

Characteristics of the gas market and its regulation

The transmission network is characterized by significant transit use. Natural gas consumption in Slovakia reached about 8% of the total volume of transported gas in 2020. Approximately 15% of the total EU natural gas demand was transported through the territory of the Slovak Republic.

The Slovak Republic is the second most gasified country in the EU after the Netherlands. In 2020, SPP - distribúcia, a.s., the country's DSO, distributed gas to more than 1.5 mil. meter points for more than 94% of Slovakia's population with access to natural gas.

The Office performs price (tariff) and technical (non-tariff) regulation in the gas sector, namely network charges – transmission and distribution, as well as the tariffs of gas supply, but only for vulnerable customers under Act 250/2012.

Regulatory policy for the 2017-2022 period and the Office Decree 223/2016 establishing tariff (price) regulation in the gas sector in accordance with Act 250/2012, continued to be the

foundation of the regulatory framework for tariff regulation for the following regulated activities in the field of networks:

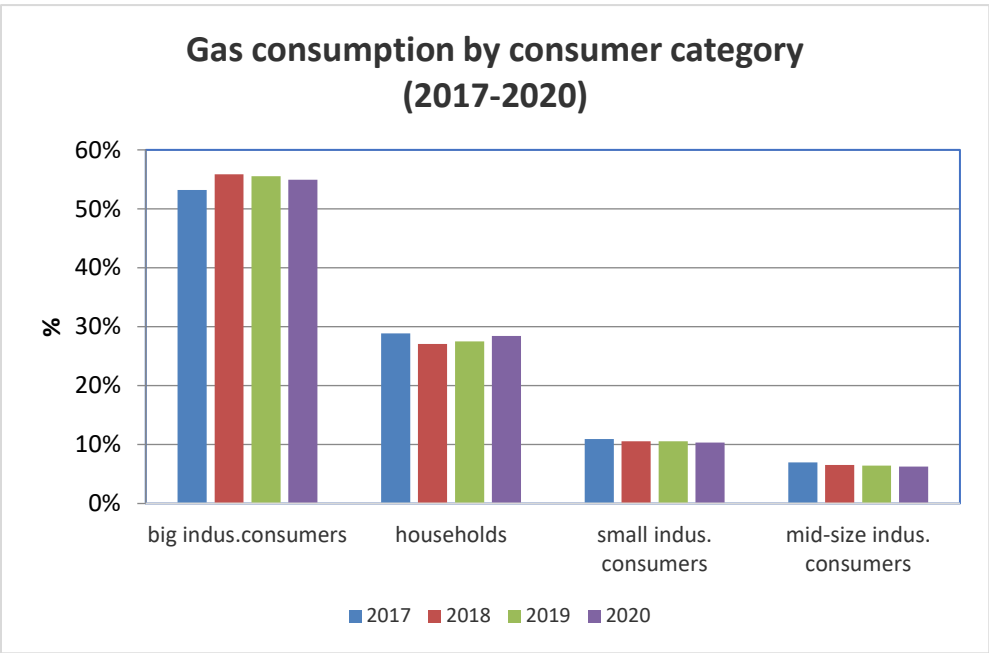
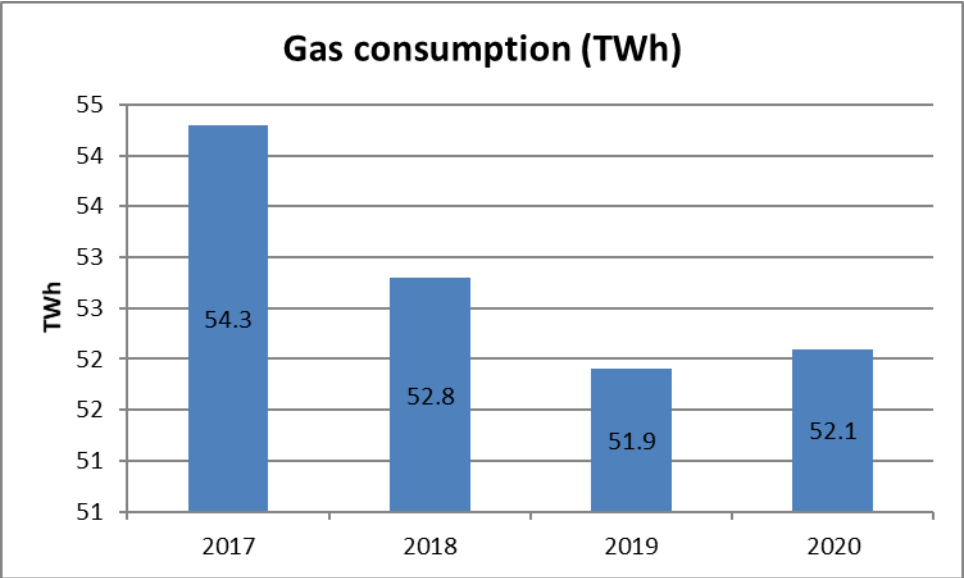
- access to the transmission network and gas transmission,
- access to the distribution network and gas distribution,
- connection to the transmission and distribution networks, both for gas producers and gas customers,
- provision of ancillary services in the gas sector.

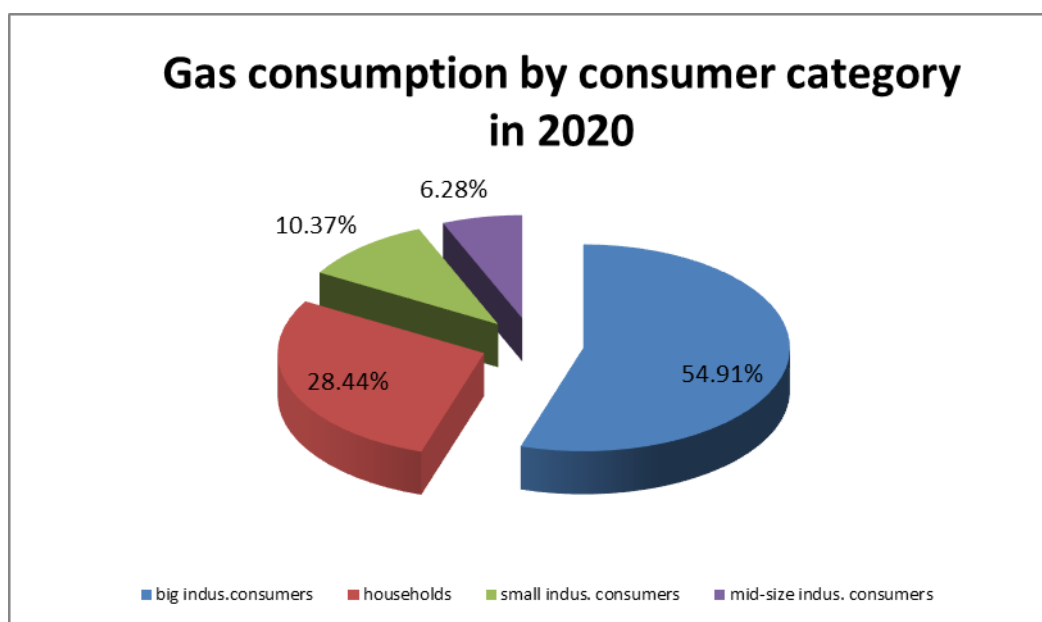
Non-tariff regulation by the Office for gas market participants also includes, inter alia, approvals of rules of operation or business terms and conditions for gas suppliers providing universal service.

Access to storage facilities and storage of gas is not subject to tariff regulation. The agreed access of gas market participants to storage may be, in case of extraordinary regulation and after prior consultation with the European Commission, superseded by the Office with regulated access in accordance with Act 250/2012.

In 2020, the Office adopted eight decisions for Eustream as an independent TSO in the matter of prior consent to the terms and conditions of service provision. The Office also monitored the obligations of SPP-distribúcia, the DSO, in the context of unbundling the activities of the DSO operating in a vertically integrated undertaking.

In 2020, we saw a sharp decline in natural gas prices on commodity exchanges, after previous years of rising prices, which was caused by lower natural gas demand, but also climate change. Gas consumption in Slovakia reached 52.1 TWh, which is about 0.4% more than in 2019.





The outlook for the coming years is rather the opposite, with a gradual rise in natural gas prices, mainly due to the advancing wave of decarbonisation across all EU countries and the associated increasing demand for gas as an alternative fuel for coal-fired power plants over a transitional period.

The Office was also actively involved in international fora on currently hotly debated issues like decarbonisation of the energy industry, especially EU strategies on hydrogen, the use of biomethane, methane emissions reduction, or carbon dioxide capture and storage. The implementation of these strategies will not only mean an important contribution to decarbonisation, but also represents a milestone in the transition to new markets with the possibility of temporary use of gas and gas infrastructure in the Slovak Republic.

Gas infrastructure

Transmission system

Slovakia's transmission network is owned and operated by Eustream. This transmission system represents an important energy link between the Russian Federation and the EU. Interconnection of Slovakia's transmission network with neighbouring EU countries (the Czech Republic, Austria, Hungary and Poland) is provided via four entry/exit points. The transmission system is also interconnected with the transmission routes in Ukraine.

The entry/exit point to/from the transmission system in Poland (Výrava) is under construction. There are two entry/exit points to/from the transmission systems in the territory of third countries outside the EU, namely Veľké Kapušany and Budince, on the border with Ukraine.

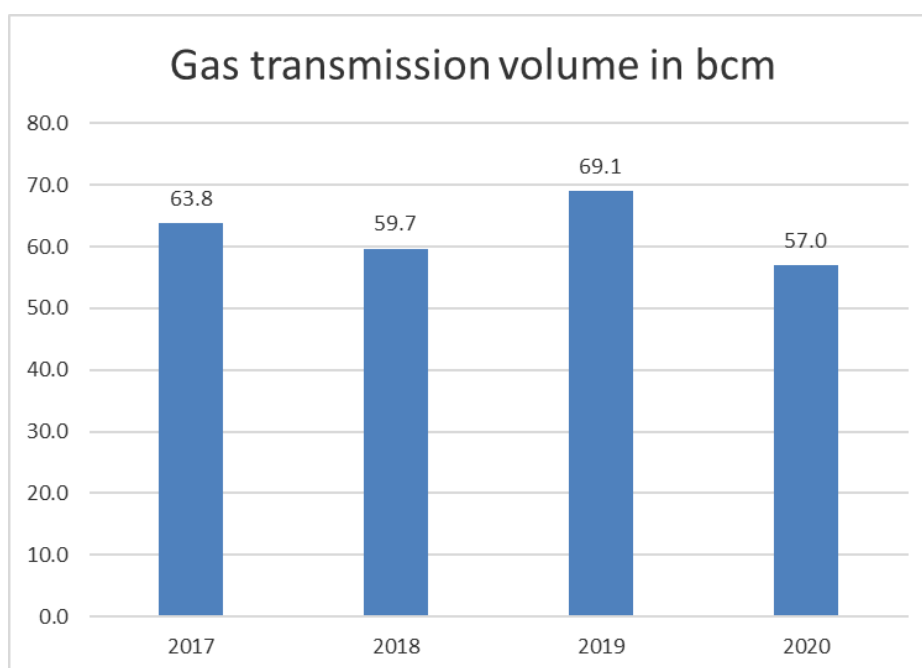
The entry/exit point to/from distribution systems and underground storage facilities in Slovakia is the domestic point.

Data on the volumes of technical, available and contracted capacities at individual entry/exit points are available on Eustream's website.

[Eustream - the gas TSO](#)

The tariff decision for access to the transmission system and gas transmission adopted by the Office in 2016 is valid for the entire 2017-2022 regulatory period. In accordance with Commission Regulation (EU) 2017/460 (network code on harmonised transmission tariff structures for gas), the Office adopted a tariff decision for access to the transmission system and gas transmission on 29 May 2019, which will come into effect under that regulation from 1 January 2022.

In 2020, the Office did not adopt any tariff decision for connection to the transmission system, as no new gas installation was connected to the transmission network.



Transmission capacity

The annual capacity of the transmission system is 90 bcm. In 2020, Eustream transported 57 bcm of gas, of which 4.6 bcm was for domestic users (about 8 % of the total volume).

Transmission system – overview of Nos. of requests and contracts

| Indicator/year | 2017 | 2018 | 2019 | 2020 |
|---|-------------|-------------|-------------|-------------|
| No. of requests for transmission network access | 1 418 | 1 212 | 2 639 | 1 294 |
| No. of requests for transmission network connection | 0 | 0 | 0 | 0 |
| No. of concluded contracts on transmission network connection | 0 | 0 | 0 | 0 |
| No. of concluded contracts on gas transmission with firm transmission capacity | 994 | 995 | 2 276 | 1 150 |
| of which: long-term | 0 | 1 | 0 | 0 |
| yearly | 74 | 24 | 27 | 29 |
| short-term, of which: | 920 | 970 | 2 249 | 1 121 |
| quarterly | | | 53 | 28 |
| monthly | | | 83 | 98 |
| daily | | | 2 013 | 874 |
| intraday | | | 100 | 121 |
| No. of concluded contracts on gas transmission with interruptable transmission capacity | 407 | 213 | 363 | 128 |
| of which: long-term | 3 | 0 | 0 | 0 |
| yearly | 0 | 0 | 1 | 0 |
| short-term, of which: | 404 | 213 | 362 | 128 |
| quarterly | | | 9 | 16 |
| monthly | | | 23 | 51 |
| daily | | | 315 | 51 |
| intraday | | | 15 | 10 |
| No. of concluded contracts on gas transmission with combined transmission capacity | 17 | 4 | 19 | 16 |
| of which: long-term | 0 | 0 | 0 | 0 |
| yearly | 1 | 0 | 0 | 4 |
| short-term, of which: | 16 | 4 | 19 | 12 |
| quarterly | | | 0 | 7 |
| monthly | | | 0 | 3 |
| daily | | | 19 | 2 |
| intraday | | | 0 | 0 |
| No. of transmission system users | 33 | 27 | 45 | 31 |

Share of network users by country of origin in gas volume transmitted

| Transmission network domestic users (transmission to the network's domestic point) | 2017 | 2018 | 2019 | 2020 |
|--|-------------|-------------|-------------|-------------|
| | (%) | (%) | (%) | (%) |
| Slovakia | 5.30 | 5.20 | 7.40 | 8.40 |
| Transiting users of the transmission network | | | | |
| Russia | 69.27 | 72.23 | 66.80 | 71.30 |
| Germany | 5.17 | 5.97 | 4.00 | 1.70 |
| Czech Republic | 4.73 | 5.72 | 7.10 | 1.80 |
| Hungary | 0.00 | 0.00 | 0.10 | 2.40 |
| Switzerland | 1.44 | 0.73 | 1.60 | 5.10 |
| UK | 0.27 | 0.03 | 1.10 | 4.50 |
| Austria | 0.00 | 0.03 | 0.80 | 0.40 |
| Denmark | 0.00 | 0.00 | 0.00 | 0.00 |
| France | 0.02 | 0.17 | 0.10 | 0.60 |
| Luxembourg | 0.39 | 0.27 | 0.30 | 1.10 |
| Ukraine | 13.41 | 9.65 | 10.10 | 0.00 |
| Poland | 0.18 | 0.03 | 0.00 | 0.00 |
| Romania | 0.00 | 0.00 | 0.40 | 0.50 |
| Netherlands | 0.00 | 0.00 | 0.20 | 2.20 |
| Total | 100 | 100 | 100 | 100 |

[TYNDP and cross-border cooperation](#)

Responsibility for the technical functioning of the transmission network lies with Eustream, the transmission system operator. The TSO submitted to the Office for approval its proposal of the Ten-Year Network Development Plan (TYNDP) for 2020-2029 together with the Report on the Implementation of the Ten-Year Network Development Plan for 2019-2028.

The Office reviewed the TYNDP proposal and published information on the results of consultations with existing and potential transmission system users on the TYNDP together with information on the evaluation of the Report on its website.

The development of gas interconnectors is also part of the TYNDP. The plan is developed in accordance with the Union-wide TYNDP (EU TYNDP), which includes, inter alia, so-called projects of common interests (PCIs). Regulation (EU) 2019/942 establishing a European Union Agency for the Cooperation of Energy Regulators obliges the national regulatory authority to cooperate with ACER in monitoring and assessing the consistency of cross-border network development investment plans with their implementation.

The TSO actively cooperates in the creation of the Union-wide TYNDP, which is prepared by ENTSO-G, as well as in the preparation of two gas regional investment plans (GRIP).

Within the GRIPs, Slovakia is part of two regions:

- Central East Europe region,
- Southern Corridor region.

The Union-wide TYNDP, 2020 edition, includes the following projects:

- Eastring - Slovakia,
- Polish-Slovak gas interconnector,
- Incremental capacity project at Lanžhot entry point,
- Incremental capacity project at Veľké Zlievce IP.

The Polish-Slovak (PL-SK) interconnector project and the incremental capacity project at Lanžhot entry point, which have a PCI status according to TEN-E Regulation, are also parts of the EU priority energy corridors, namely the Southern Gas Corridor and the North-South gas interconnections in Central Eastern and South Eastern Europe.

The projects represent an important interconnection of gas infrastructures of Western and Northern Europe with South-Eastern Europe, which, thanks to access to new natural gas sources from different regions, will significantly increase security of supply in the Central Eastern and South Eastern Europe. The projects are of great significance not only for the Slovak Republic, but also for the whole European region.

[PL-SK interconnector](#)

The Polish - Slovak interconnection project represents the construction of a new cross-border interconnector of gas pipelines connecting the transit systems of Poland and Slovakia.

The aim of the integration of Poland's and Slovakia's gas pipeline systems, as part of the North-South Corridor, is to provide diversification and stability of gas supply in both countries, as well as to strengthen the development of a competitive gas market across the region. The interconnector may open access to Polish companies to gas supply from the Southern Corridor which is to supply natural gas from the Caspian Sea region, or to LNG supply from the Adriatic Sea, or, vice versa, in the future it may offer not only the Slovak market but also the whole

region an opportunity of gas supply from the Baltic Sea region, as well as from unconventional deposits in Poland.

[Incremental capacity project at Lanžhot entry point](#)

By having implemented the project, the fixed capacity at the Lanžhot entry point reached 55.1 bcm/year. The reason for the transmission capacity increase was to satisfy the indicated interest of Eustream customers in the transmission of natural gas in the direction from the Czech Republic to Slovakia.

In case of yet increased interest of transmission network users in the transmission of gas in the direction from the Czech Republic, further expansion of fixed capacity to around 61.7 bcm/year is foreseen. The expected date of commissioning of the project's second phase is 2025.

[Incremental capacity project at Veľké Zlievce IP](#)

Due to the expected changes in natural gas flows within Europe, an investment project is underway for increasing fixed transmission capacity at the Veľké Zlievce interconnection point. The implementation of the project will contribute to effective diversification of natural gas sources, thus promoting competition in the internal energy market, and to the increase of security of gas supply in Central and Eastern Europe and new opportunities for price arbitrage in Central European gas hubs.

In 2020, internal analyses of the project continued. Its implementation and commissioning will depend on market demand for a given capacity based on the developments associated with the natural gas extraction project in the Black Sea region.

[Eastring](#)

The aim of the foreseen Eastring project, which includes Eastring - Slovakia in the territory of the Slovak Republic, is to build a bi-directional gas pipeline connecting the existing key infrastructure in Slovakia, connected to West European gas hubs, with gas infrastructures in Hungary, Romania, Bulgaria and Turkey.

The countries of South-Eastern Europe would thus gain access to Western European gas hubs thanks to the Eastring project. In the north-south direction, the project will also offer business opportunities for natural gas suppliers from Central and Western Europe to establish themselves in the Balkan and Turkish markets.

The technical capacity of the gas pipeline in the initial phase should reach 20 bcm per year and may be increased in the final phase up to 40 bcm per year. Its length, depending on the routing

decision, should be about 1 200 km with pipelines with a DN 1400 diameter in bi-directional traffic.

Distribution system

SPP-distribúcia – the gas DSO

As at 31 December 2020, the distribution network of SPP - distribúcia, the country's DSO, had a total length of 33 336 km. The length of high-pressure gas pipelines was 6 287 km and the length of medium-pressure and low-pressure gas pipelines was 27 049 km.

Investments in the renewal and reconstruction of the SPP – distribúcia distribution system

| Volume in mil. € | 2017 | 2018 | 2019 | 2020 |
|------------------|-------|-------|------|-------|
| | 26.36 | 28.16 | 33.6 | 34.87 |

No. of meter points and volumes of gas distributed by SPP - distribúcia

| | 2017 | 2018 | 2019 | 2020 |
|--|---------------|---------------|---------------|---------------|
| No. of meter points | 1 514 282 | 1 518 200 | 1 522 710 | 1 526 582 |
| Distributed gas volume in m ³ | 4 901 064 256 | 4 777 815 776 | 4 841 280 704 | 5 003 958 741 |

Of the total number of meter (off-take) points, 14 are CNG filling stations with the distributed gas volume of 7 476 015 m³, roughly the same volume as in 2019.

Distribution network balancing

It is performed in such a way so that a safe and reliable gas distribution is provided in the event of a gas shortage, or surplus in the distribution network.

SPP-distribúcia has for this purpose gas stored in the underground storage Dolní Bojanovice located in the Czech Republic.

Network balancing (in mil. m³/day) – gas withdrawal/injection from/into underground storage

| | 2017 | 2018 | 2019 | 2020 |
|---------------------------|------|------|------|------|
| gas shortage - withdrawal | 1.9 | 1.8 | 1.5 | 1.6 |
| gas surplus - injection | 2.5 | 1.4 | 1.3 | 1.9 |

Local distribution system (LDS) operators

In 2020, there were 37 registered LDS operators distributing gas in 53 local distribution systems (large company premises, industrial parks, shopping centres, residential complexes) in the total volume of 884 609 250 m³.

Ten customers (or meter points) changed their supplier in LDS. In addition to the LDS operators themselves, who performed the role of a gas supplier to the meter points, eight other suppliers also supplied gas to the meter points in LDS.

Underground storage system operators (SSOs)

Underground storage is used primarily for seasonal storage of natural gas. It also represents an important tool increasing the country's energy security. In Slovakia's territory, underground storage facilities are operated by NAFTA and POZAGAS. Access to storage and gas storage were not subject to tariff regulation in 2020.

Storage capacities of the SSOs

| SSO | Technical working volume | | | | Technical injectability | | | | Technical deliverability | | | |
|--------------|----------------------------|--------------|--------------|--------------|---------------------------|--------------|--------------|--------------|---------------------------|--------------|--------------|--------------|
| | (mil.m ³ /year) | | | | (mil.m ³ /day) | | | | (mil.m ³ /day) | | | |
| | 2017 | 2018 | 2019 | 2020 | 2017 | 2018 | 2019 | 2020 | 2017 | 2018 | 2019 | 2020 |
| NAFTA | 2 931 | 3 061 | 3 357 | 3 357 | 31.87 | 31.87 | 31.87 | 31.87 | 36.96 | 36.96 | 39.51 | 39.51 |
| POZAGAS | 655 | 655 | 655 | 655 | 6.85 | 6.85 | 6.85 | 6.85 | 6.85 | 6.85 | 6.85 | 6.85 |
| Total | 3 586 | 3 716 | 4 012 | 4 012 | 38.72 | 38.72 | 38.72 | 38.72 | 43.81 | 43.81 | 46.36 | 46.36 |

NAFTA concluded 72 contracts with storage users, of which one contract with interruptible capacity and 71 contracts with firm capacity. The company received 100 requests, of which 34 requests were rejected due to capacity allocation to other requesters in line with applicable legislation.

POZAGAS received 26 requests for access to storage and concluded 11 contracts with firm capacity. Other applications were rejected due to a better price offered by other bidders.

Competition

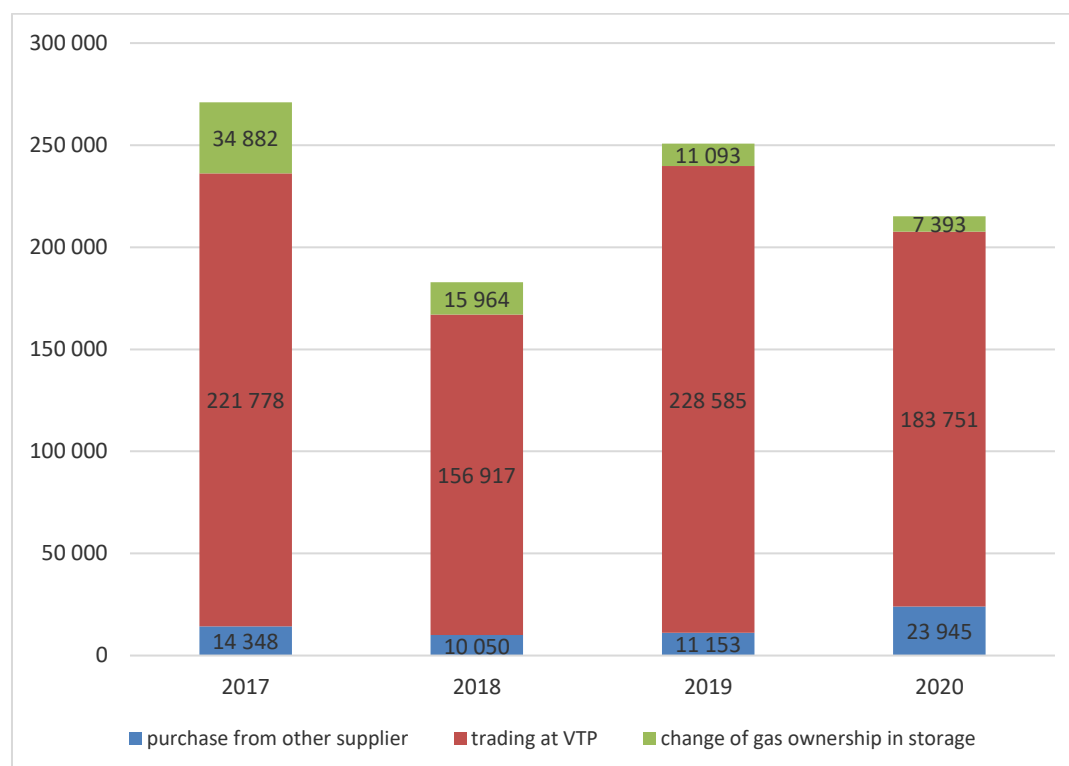
Wholesale market

Slovakia's wholesale gas market is characterized by:

- gas purchases on the basis of long-term contracts,
- gas purchases on commodity exchanges,

- gas purchases from another trader - gas supplier (23 945 GWh in 2020, up by about 100% compared to 2019),
- trading at the virtual trading point of Eustream in the volume of 183 751 GWh, which is approximately 20% less than in 2019,
- trading, or changing gas ownership in underground storage, with 7 393 GWh volume of gas having changed its owner.

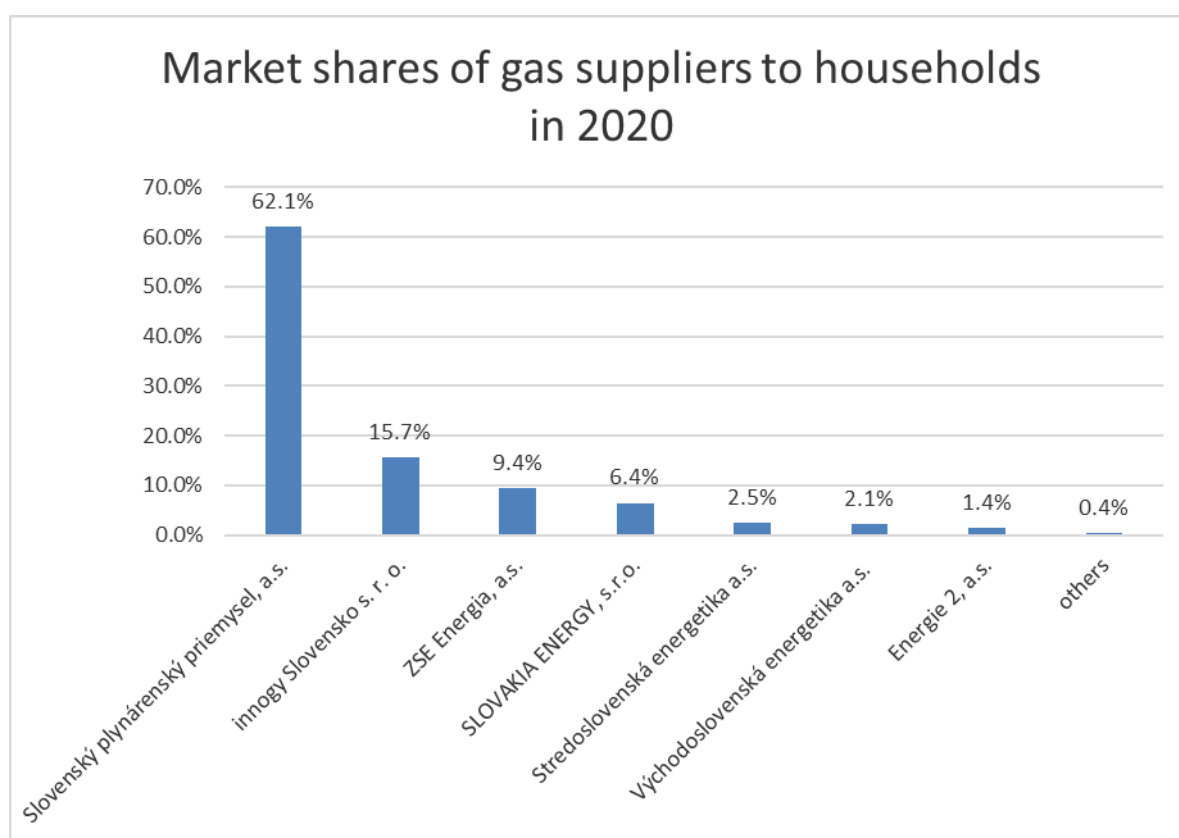
Wholesale market trading indicators (in GWh)



Gas market participants

- the transmission system operator (Eustream),
- the distribution system operator in the territory of the Slovak Republic (SPP - distribúcia),
- 37 local distribution system operators,
- two underground storage operators (NAFTA, POZAGAZ),
- 26 active gas suppliers,
- gas consumers.

Pursuant to Act 250/2012, tariff decisions adopted in 2016 for gas suppliers supplying gas to vulnerable consumers, i.e. households and small enterprises with annual consumption of up to 100 000 kWh for the previous year, remain in force throughout the whole regulatory period (2017–2022). During the regulatory period, tariff decisions changed mainly due to a change in the reference price (exchange price EEX NCG Calendar +1), which is a determining factor for calculating the maximum gas supply tariff. A total of 16 nation-wide suppliers supplied gas to vulnerable gas consumers - households.

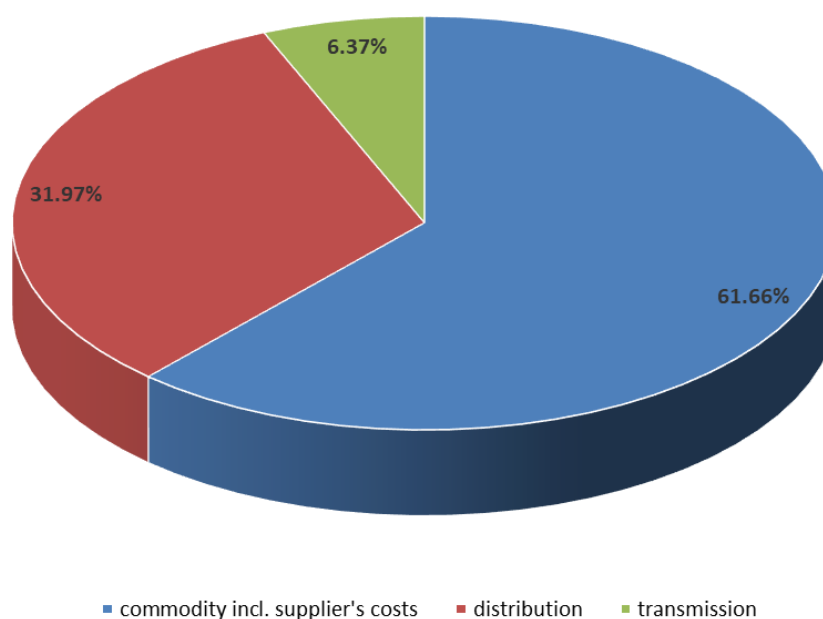


Tariffs

Overview of maximum tariffs for gas supply to households, including network fees, according to average consumption in individual tariff categories for vulnerable consumers

| Tariffs (by annual volume of supplied gas in kWh) | Fixed monthly tariff (€/month) | | | | Variable tariff for gas consumed (€/kWh) | | | |
|---|-----------------------------------|--------------------|-------|-------|---|--------------------|--------|--------|
| | 2017 | from 01.12.2018 | 2019 | 2020 | 2017 | from 01.12.2018 | 2019 | 2020 |
| 1 (up to 2 138 kWh) | 1.96 | 2.78 | 2.78 | 2.78 | 0.0434 | 0.0453 | 0.0453 | 0.0453 |
| 2 (above 2 138 up to 18 173 kWh) | 5.76 | 5.76 | 5.76 | 5.76 | 0.0325 | 0.0333 | 0.0333 | 0.0333 |
| 3 (above 18 173 up to 42 760 kWh) | 8.64 | 8.64 | 8.64 | 8.64 | 0.0310 | 0.0332 | 0.0332 | 0.0332 |
| 4 (above 42 760 up to 69 485 kWh) | 13.36 | 13.36 | 13.36 | 13.36 | 0.0304 | 0.0320 | 0.0320 | 0.0320 |
| 5 (above 69 485 up to 85 000 kWh) | 42.45 | 42.45 | 42.45 | 42.45 | 0.0399 | 0.0420 | 0.0420 | 0.0420 |
| 6 (above 85 000 up to 100 000 kWh) | 51.78 | 51.78 | 51.78 | 51.78 | 0.0398 | 0.0419 | 0.0419 | 0.0419 |

Breakdown of average end user gas price for households in 2020



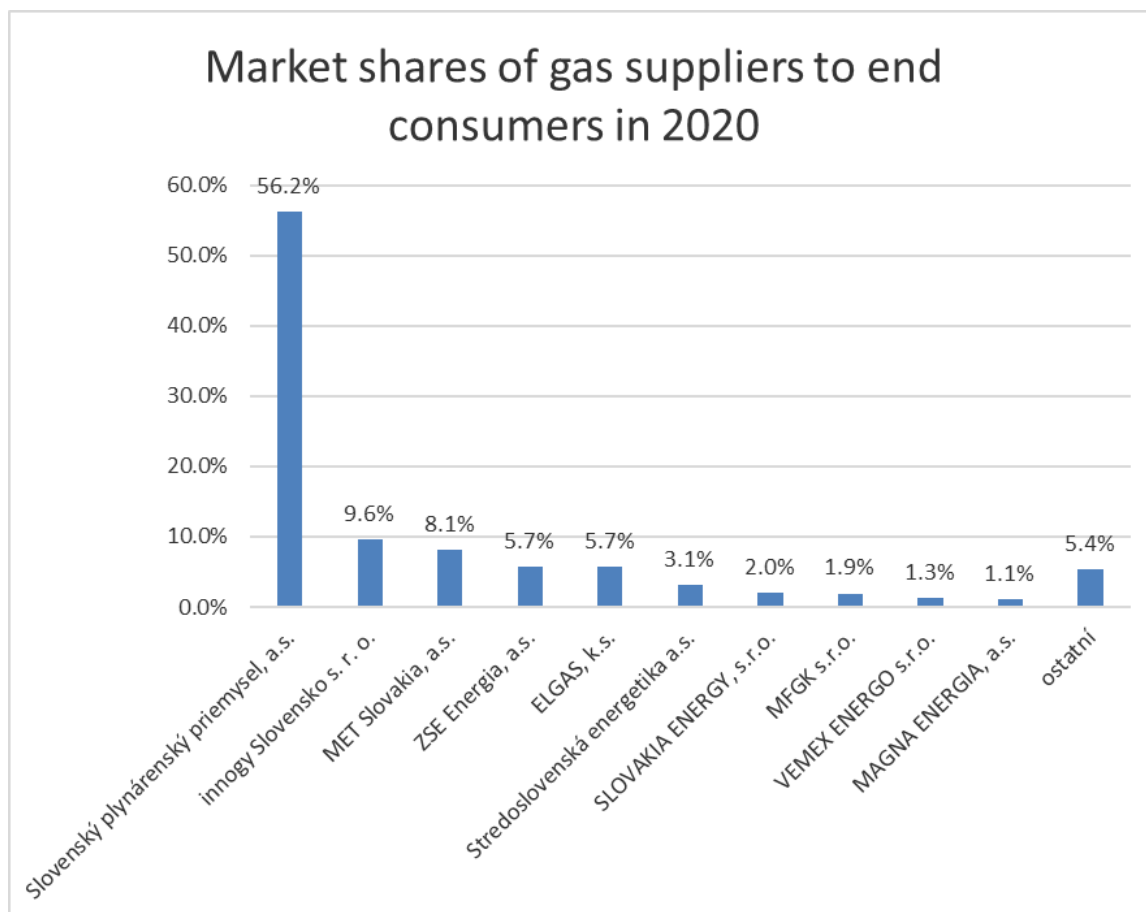
Assumption for 2021 of average values of maximum tariff of gas supply to households, including network fees, based on tariff proceedings conducted in the last quarter of 2020, tariffs according to average consumption in individual tariff categories for vulnerable customers

| Tariffs (by annual volume of supplied gas in kWh) | Fixed monthly tariff (€/month) | Variable tariff for gas consumed (€/kWh) |
|--|---|---|
| 1 (up to 2 138 kWh) | 2.78 | 0.0419 |
| 2 (above 2 138 up to 18 173 kWh) | 5.76 | 0.0297 |
| 3 (above 18 173 up to 42 760 kWh) | 8.64 | 0.0295 |
| 4 (above 42 760 up to 69 485 kWh) | 13.36 | 0.0279 |
| 5 (above 69 485 up to 85 000 kWh) | 42.45 | 0.0356 |
| 6 (above 85 000 up to 100 000 kWh) | 51.78 | 0.0355 |

[Last resort gas supply](#)

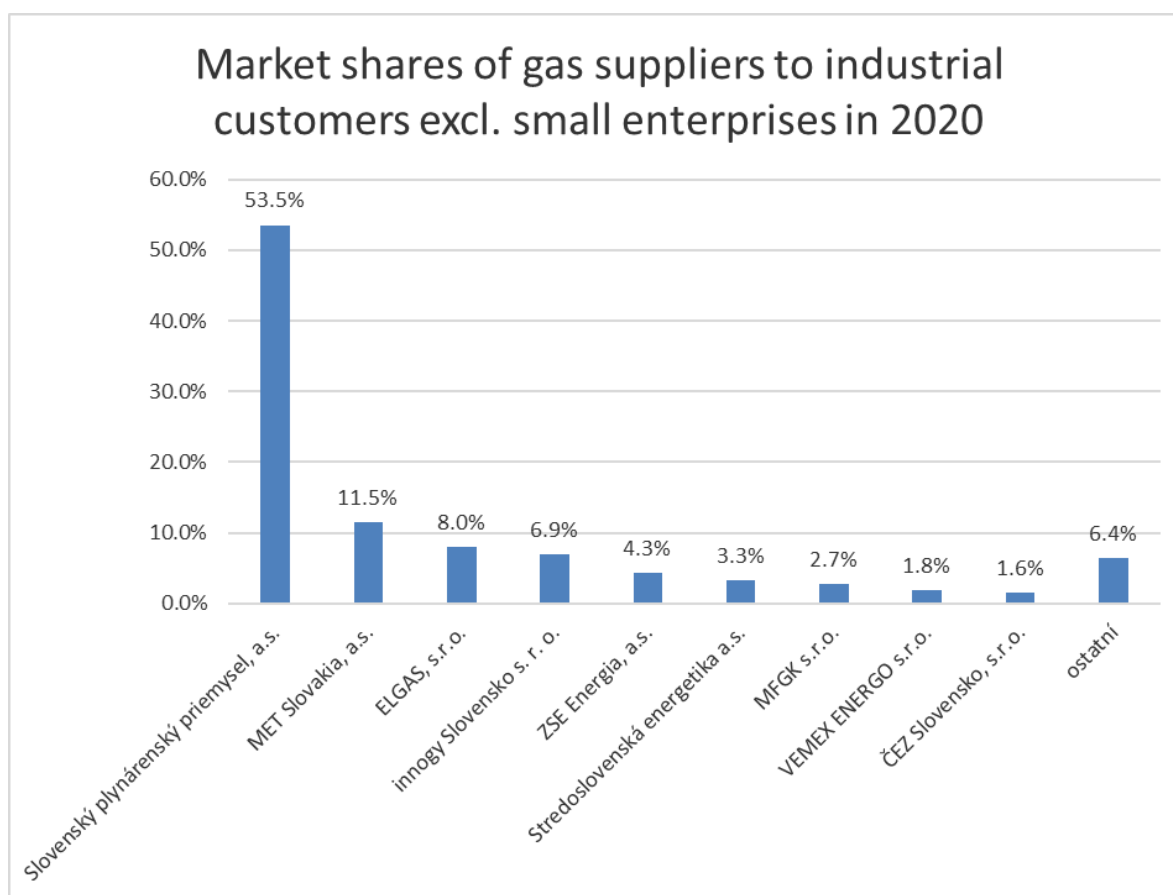
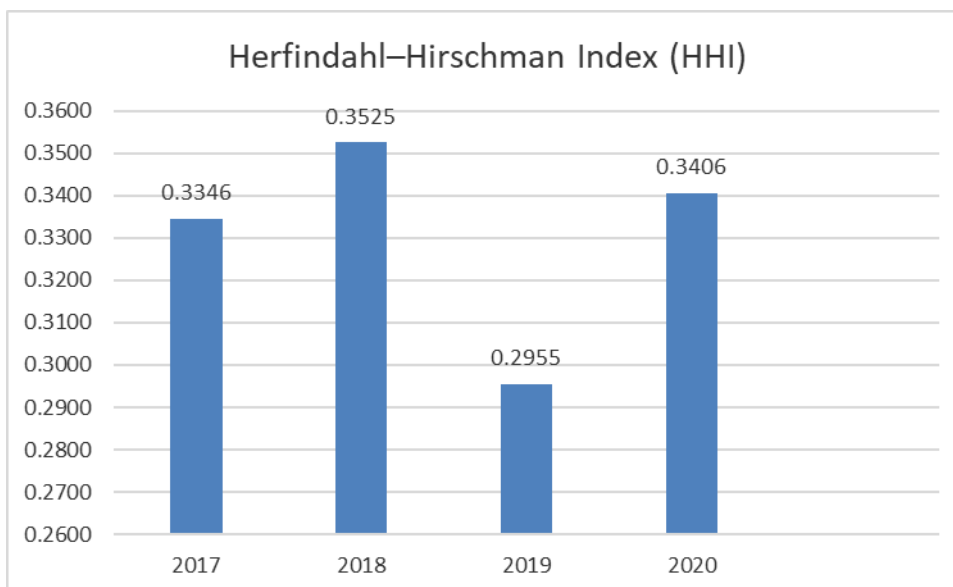
Based on the Office's decision, Slovenský plynárenský priemysel (SPP) continued to be also in 2020 the supplier of the last resort. The Office received three notifications of the application of the last resort supplier regime, when the original gas supplier had lost the ability to supply gas to consumers under Act 251/2012.

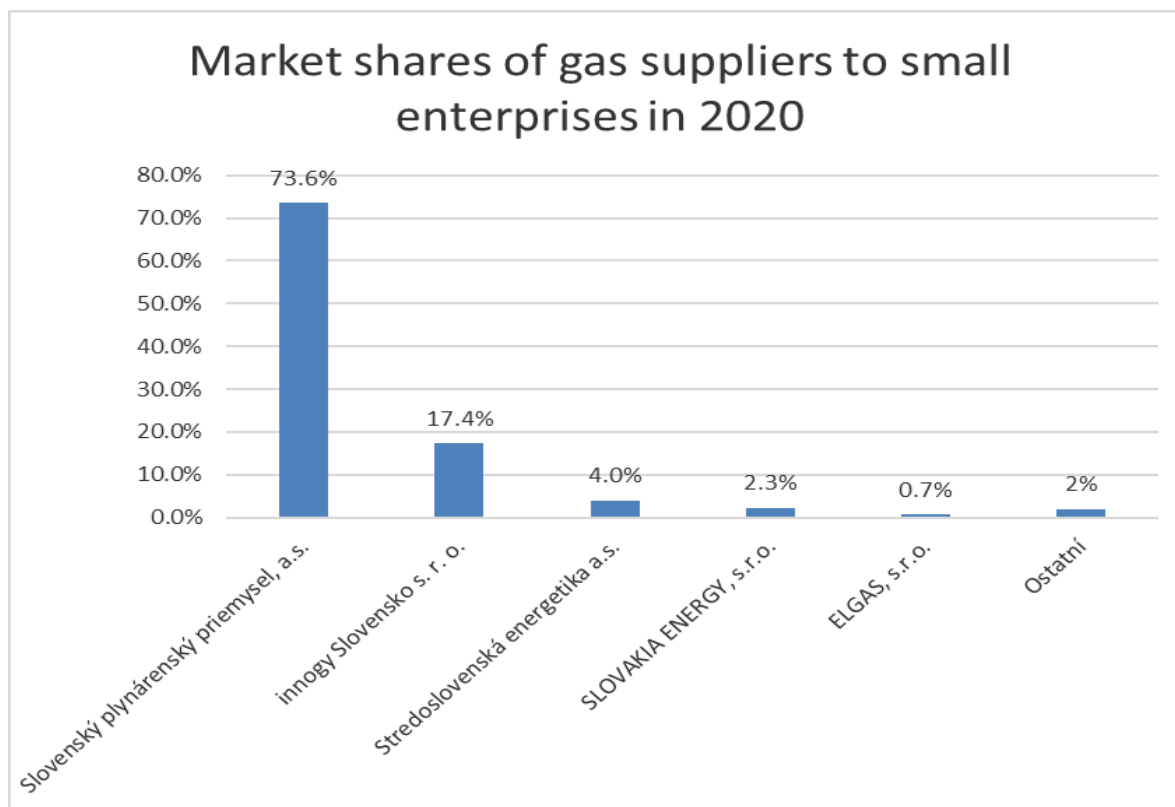
In 2020, there were 26 active gas suppliers to end gas consumers in the Slovak Republic.



Herfindahl-Hirschman Index

The purpose of the HHI (Herfindahl-Hirschman Index) is to measure the level of market concentration of regulated companies in a competitive environment. The Office reviewed market positions of regulated companies supplying gas to all consumers. The market is considered concentrated if the HHI-score is higher than 0.1 and highly concentrated if it exceeds 0.2. Increased HHI in 2020, as compared to the previous year, signifies increased market concentration. HHI stands above the high concentration threshold.

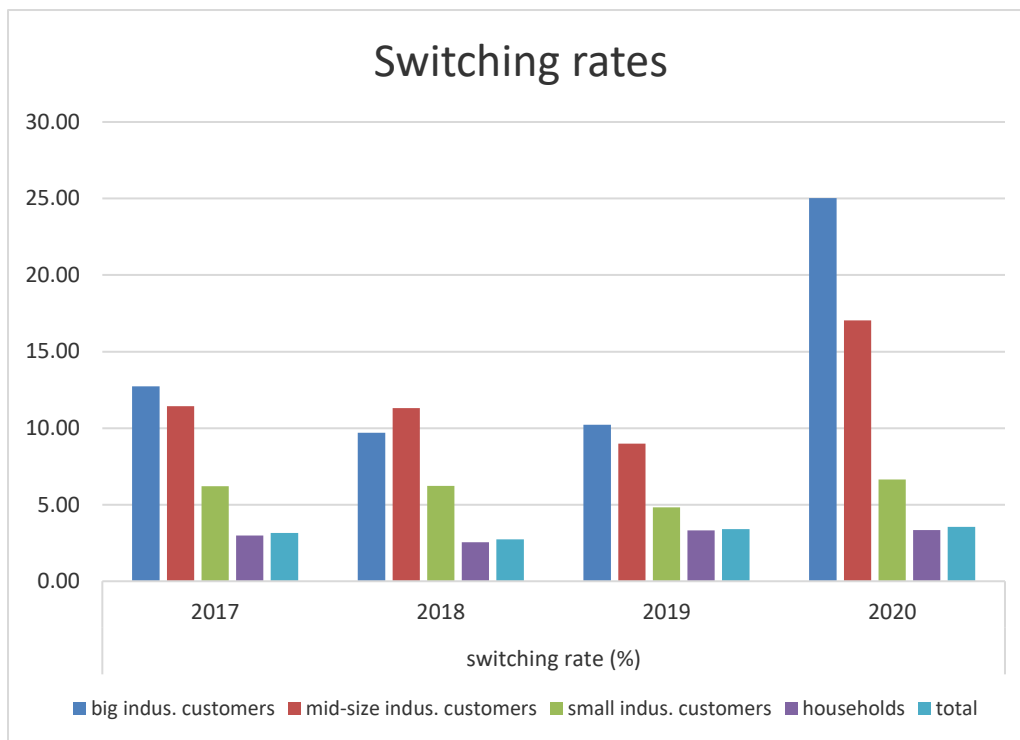




Switching

In the year-on-year comparison of 2020 and 2019, we saw almost double switching values in the large consumer and mid-size consumer categories, where higher gas consumption in these market segments that are not subject to tariff regulation clearly led to negotiating a better price of gas supply with the new supplier.

| Customer category | No. of customers who switched | | | | switching rate (%) | | | |
|----------------------------------|-------------------------------|--------|--------|--------|--------------------|-------|-------|-------|
| | 2017 | 2018 | 2019 | 2020 | 2017 | 2018 | 2019 | 2020 |
| big indus. customers | 93 | 71 | 90 | 179 | 12.72 | 9.69 | 10.22 | 25.03 |
| mid-size indus. customers | 322 | 314 | 284 | 478 | 11.44 | 11.30 | 8.99 | 17.05 |
| small indus. customers | 4 743 | 4 765 | 3 687 | 5 093 | 6.21 | 6.23 | 4.82 | 6.64 |
| households | 43 670 | 36 627 | 48 000 | 48 481 | 2.98 | 2.54 | 3.32 | 3.35 |
| total | 48 828 | 41 777 | 52 061 | 54 231 | 3.16 | 2.74 | 3.41 | 3.55 |



Impact of the corona crisis

As part of the government measures announced in 2020 in response to the spread of COVID-19 and in particular in connection with the consequences of these measures, the Office addressed regulated companies as well as other gas market participants with a request to be helpful in resolving possible breaches of contractual relations due to limitations of the performance of some business activities on the part of gas customers.

Despite the very difficult pandemic situation that has lasted since March 2020 and continues into 2021, and the ensuing restrictive measures, these measures did not have a significant impact on the gas market. Gas consumption in Slovakia even increased slightly by 0.4%.

The number of gas suppliers was stable and the number of customers did not undergo major changes. This can also be explained by social measures taken by the government during the pandemic.

The position of gas suppliers has strengthened, with only one gas supplier with a very small market share completely having ended their gas supply.

Implementation of EU legislation

In the year under review, the Office adopted, pursuant to Commission Regulation (EU) 312/2014 (network code on gas balancing of transmission networks), decision 0001/2020/P-EU of 14 April 2020 approving the “Updated report on the application of interim measures” for the TSO.

Additionally, the Office adopted decision 0002/2020/P-EU of 5 May 2020 pursuant to Commission Regulation (EU) 2017/459 (network code on capacity allocation mechanisms in gas transmission systems) approving the TSO's incremental capacity project proposal based on the rulebook of the binding incremental capacity procedure for gas transmission from Hungary to Slovakia.

In the context of the application of Regulation (EU) 2017/1938 concerning measures to safeguard the security of gas supply, the Office actively participates in meetings of a working group, the purpose of which is to prepare agreements between the Slovak Republic and other EU Member States on the application of the solidarity mechanism in order to safeguard the security of gas supply in the event of a crisis. Currently legislative changes are underway in Act 251/2012 concerning, inter alia, solidarity. The primary role of the Office consists mainly in monitoring and setting the conditions of pricing in crisis situations in order to minimise the adverse effects on Slovakia's households.

3. Consumer protection and dispute settlement

Consumer protection

The Office's inspection activities consist in the conducting of on-site inspections, which follows from the Regulatory Act (250/2012), as well as of off-site inspections focusing on monitoring compliance with administrative obligations of regulated entities towards the Office.

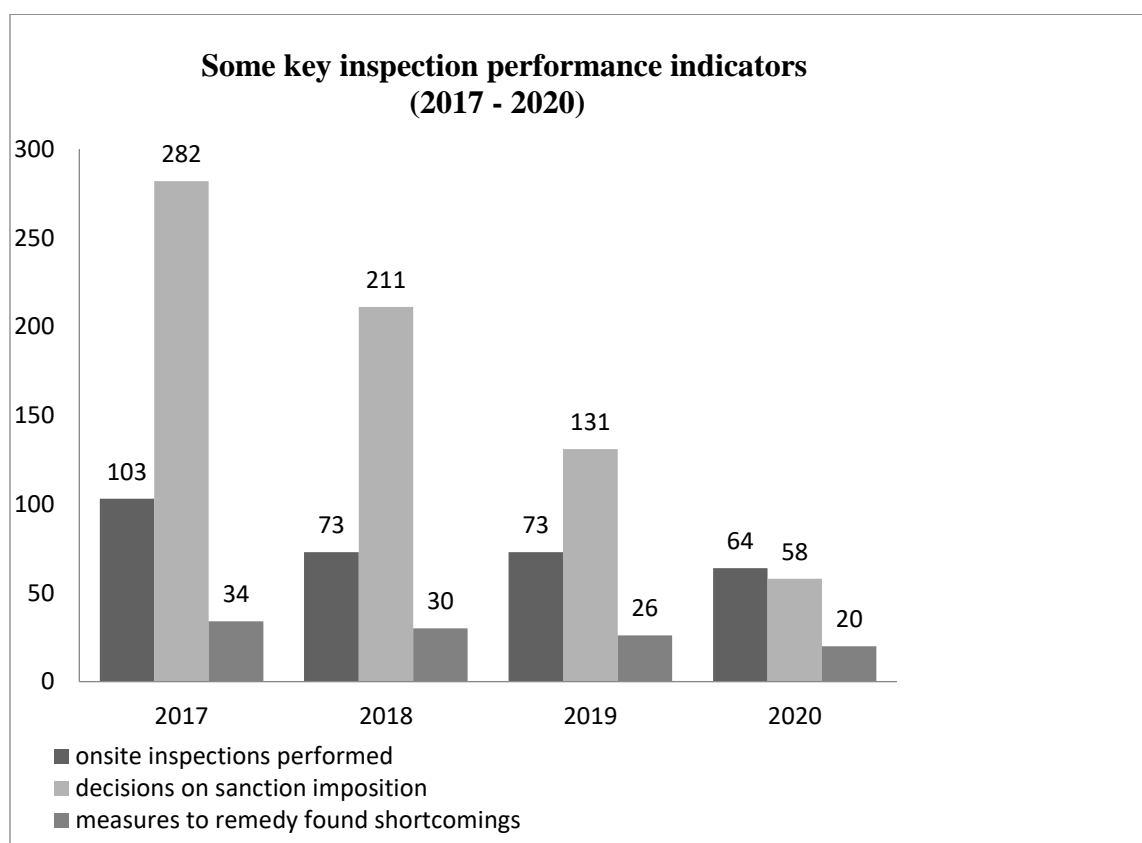
Despite the difficult conditions resulting from the COVID-19, the Office performed on-site inspections in 64 regulated entities - in five entities, based on received alerts and in 59 entities, according to the regular on-site inspection plan. Out of the total number, 35 inspections were completed by making a report on the result of the performed inspection, i.e. with identified breach of applicable legislation and 29 inspections were completed by making a record of the result of the inspection, i.e. without finding a breach of applicable legislation.

The inspections focused on compliance with applicable legislation in the performance of regulated activities in network industries for the period 2016-2020. In this context, the

inspections focused on compliance with the scope of tariff regulation, non-tariff regulation and regulation of quality standards as approved by the Office.

In 2020, on-site inspections were carried out in 33 electricity undertakings. In 13 of them, a total of 44 breaches of Act 250/2012 and Act 251/2012 were identified. In gas, the Office conducted inspections in 13 undertakings - in eight of them, a total of 35 breaches of Act 250/2012 and Act 251/2012 were discovered. The most frequent breach of Act 250/2012 by electricity and gas entities was a failure to perform regulated activities in accordance with an applicable decision or confirmation of the Office and non-compliance with principles of tariff regulation according to a generally binding legal act issued by the Office (Decree).

In addition to on-site inspections, the Office found breaches of provisions of Act 250/2012 or Act 251/2012 also by off-site inspections. As a result, a total of € 13 000 in fines was imposed on 13 entities. The Inspection Department also received 54 alerts from natural or legal persons - 26 of them were included in the on-site inspection plan and in four cases a breach of the current legislation was found.



Dispute settlement

The year 2020 was affected by the COVID-19 pandemic, but so far, from the consumer protection perspective, a bigger problem with paying for energy compared to previous years on the side of customers was not observed. A large part of the complaints concerned the manner of concluding energy supply contracts or energy supplier switching. In the year under review, customers addressed the Office as a result of errors in electricity or gas consumption metering, connection to the distribution system and quality of supply.

In 2020, the Office handled a total of 353 consumer submissions and complaints.

Since 2016, the Office has been a body for the alternative dispute resolution in accordance with a special consumer disputes regulation arising from Act 391/2015 on alternative dispute resolution as amended.

A total of 8 requests were received by the Office. The most common reason of submitting ADR requests in 2020, as in the previous period, was in particular a disagreement or doubts about the correctness of consumption invoicing by the regulated entity. Consumers demanded correctness of measured consumption data and supplier invoicing to be verified, and consequently invoices to be corrected.

In 2020, the Office received one request for an alternative dispute resolution pursuant to Section 37 of Act 250/2012.

Nos of disputes settled out-of-court

| | 2017 | 2018 | 2019 | 2020 |
|---|------|------|------|------|
| No. of received ADR requests | 28 | 11 | 19 | 9 |
| No. of ADR requests pursuant to § 37 of Act 250/2012 | 6 | 2 | 1 | 1 |
| No. of ADR requests pursuant to Act 391/2015 | 22 | 9 | 18 | 8 |
| No. of unfinished disputes | 6 | 0 | 0 | 0 |

In technical (non-tariff) regulation, the Office also decides on the granting, amendment and revocation of licenses. Natural and legal persons may do business in the electricity and gas sectors on the basis of a license or confirmation of compliance with the notification obligation issued pursuant to Act 251/2012.

Quality standards

By monitoring quality standards, the Office protects the consumer's right to receive, in the context of the dominant position of a regulated entity, adequate quality for the price that the consumer pays for energy and water. Decrees laying down quality standards are primarily aimed at protecting the consumer under the dominant position of a regulated entity operating in one of the network sectors. Compensation payments have a supporting function in quality standards regulation. Quality standards regulation aims to incentivise regulated entities to uphold and increase the level of compliance with quality standards and also to motivate them to invest in ensuring and increasing the infrastructure's safety, stability and development.

No. of reviews and recorded events in electricity

| Electricity | Transmission | Distribution | Supply |
|--|--------------|--------------|-----------|
| No. of reviews | 1 | 137 | 165 |
| No. of recorded events | 4 | 7 505 409 | 1 672 733 |
| No. of recorded events with a breach of quality standards | 0 | 18 800 | 405 |
| Share of recorded events with a breach of quality standards to recorded events | 0.00% | 0.25% | 0.02% |

No. of reviews and recorded events in gas

| Gas | Storage | Transmission | Distribution | Supply |
|--|---------|--------------|--------------|-----------|
| No. of reviews | 2 | 1 | 37 | 69 |
| No. of recorded events | 937 | 215 | 77 461 | 1 092 758 |
| No. of recorded events with a breach of quality standards | 0 | 20 | 175 | 381 |
| Share of recorded events with a breach of quality standards to recorded events | 0.00% | 9.3% | 0.23% | 0.03% |

KPI monitoring

In 2020, the Office monitored data from the separate accounting records for 2019, receiving a total of 1 322 records from market participants in the following structure:

- 1 231 records in electricity,
- 17 records in gas,
- 74 records simultaneously in electricity and gas.

Key performance indicators of selected electricity and gas regulated entities for the monitored period were fulfilled at an average of 77.29%, which shows the conditions set by the Office in tariff and non-tariff regulation were adequately set.

4. International cooperation and REMIT

International cooperation

The dynamics of the development of the European energy markets are constantly increasing, and this continued to be the case also in 2020. The climate change mitigation efforts were particularly important, with the main focus being on accelerating the transition to the generation and consumption of clean energy. The discussion of regulators clearly focused on trying to create the right conditions for a successful functioning of the energy market, in particular on creating a market design where individual elements of the whole value chain will interact and will bring, in a coordinated manner and based on innovative approaches of stakeholders, the desired effect. The aim of this effort is to create a dynamic and flexible energy market in a decentralized and technology-neutral way. The Office in close cooperation with other regulators within ACER and CEER, worked on the preparation and commenting of important documents on the design and development of the European single electricity market. In 2020, the Office participated in the discussions and subsequent approval of an important methodology for cost sharing of redispatching and countertrading in the CORE capacity calculation region (of which Slovakia is a part). The coalition of nine national regulators, including URSO, succeeded in supporting a fair and compromise proposal of the methodology adopted by ACER. Another important issue was the interim day-ahead electricity market coupling project based on NTC of the MRC and 4MMC regions, which was supported by the Office and finally decided on by the Commission in September. The implementation of the project will take place prior to the target solution of flow-based market coupling.

A milestone in the European intraday electricity market coupling efforts was also the signing of the accession agreements by SEPS and OKTE for SIDC/XBID.

REMIT

Regulation (EU) 1227/2011 on the integrity and transparency of the wholesale energy market (REMIT) lays down rules for market participants trading in the wholesale electricity and gas markets and prohibits insider trading and market manipulation. By Act 250/2012 with effect from 1 September 2012, the Office acquired the authority to register Slovakia's market participants, to investigate potential cases of market abuse and to impose sanctions in case of a breach.

In accordance with Commission Implementing Regulation (EU) 1348/2014 on data reporting implementing Art. 8 (2) and (6) of REMIT, market participants are obliged to register in the national register of market participants and report data on wholesale transactions through registered reporting mechanisms (RRM) certified by ACER.

As of 31 December 2020, a total of 124 market participants trading in Slovakia's wholesale energy market were registered by the Office. The majority of the market participants reported their transaction data to ACER through two Slovakia's RRM, OKTE and Solien.